## Visually <br> Impaired



## Curriculum Guide Interim Edition

## september, 1981

ALTA
371.911

1981

$$
1
$$

Note: This curriculum guide is a service publication only. The official statement regarding the program for visually impaired students is contained in the Special Education Program of Studies. The information in this guide is prescriptive insofar as it duplicates the official statement given in the Program of Studies.

# Digitized by the Internet Archive <br> in 2012 with funding from University of Alberta Libraries 

## INTRODUCTION

The purpose of this curriculum guide is to provide guidelines for educational programming for visually impaired children and adolescents throughout Alberta. The document was written for the use of parents, teachers, school administrators and staff from allied professions.

## Population or Target Group:

Visually Impaired (V.I.): The visually impaired child is one whose visual condition is such that it interferes with his ability to learn unless educational adaptations are made. Visual limitations may be further divided into the categories of blind and partially sighted.

Blind: Educationally, a child is considered to be blind and a braille-user if, after all possible visual correction, he must depend for learning upon senses other than vision. All students in this group are legally blind.

Partially Sighted: Educationally, a child is considered to be partially sighted if, after all possible visual correction, he requires special materials and services, but uses visual media including print in learning. The more severely visually impaired students in this group are also legally blind. After correction they will continue to have severely restricted visual fields and/or visual acuities, in the better eye, of $6 / 600$ metric or 20/200 English or less. Some partially sighted students are legally blind. These students often require the same degree of support services as blind or braille-using students.

Visual impairments may be thought of as ranging along a continum from a slight vision loss to the extensive or total loss defined as legal blindness. Many factors, including the degree of visual loss, will determine the extent of assistance and support necessary for the individual visually impaired student. In addition to funding, consultative and material services provided for all visually impaired students there are special funds available for the more extensive support required by legally blind students.

Educational needs vary for congenitally blind children and for those with adventitious loss of vision. This guide attempts to make recommendations for children in all of the above categories.

Although the specific needs of multiply handicapped visually impaired children are not discussed in this guide much of the information would be helpful to those attempting to provide for any child who has a vision loss.

Scope:
Because of the pervasive effects of visual impairment on all areas of development it is essential that children be given appropriate attention as early as possible. Ideally, assistance should be available from the day of diagnosis which in some cases, is the day of birth.

The responsibility of the educational program continues until the student has made a transition to a program in continuing education (either academic or vocational) or to a job placement. This transfer between school and adult learning and living is a critical period for the student in which he will need careful guidance.

Included in the guide are descriptions of the educational components (objectives, strategies and materials) for pre-school programs and curricula for Division 1 through 4. Specifically listed are sequences for the development of specialized skills, suggestions for modifying the regular curriculum for visually impaired students and reference material for each subject area for further reading. The Special Education Handbook section The Visually Impaired Student in the Regular Classroom is essential reading for teachers of (one or more) visually impaired students.

# ACADEmIC s\&CTIOn 

ACKNOWLEDGEMENTS ..... i
COMMUNICATION ..... 1
Levels 1 and 2 (Preschool) ..... 2
Level 3 (Grades 1, 2 and 3) ..... 11
Level 4 (Grades 4, 5 and 6) ..... 23
Level 5 (Grades 7, 8 and 9) ..... 37
Level 6 (Grades 10, 11 and 12) ..... 61
MATHEMATICS ..... 65
Pre-Academic, Levels 1 and 2 (Preschool) ..... 66
Mathematics for Braille-using Students, Introduction ..... 74
Mathematics for Braille-using Students, Level 3 (Grade 1) ..... 76
Mathematics for Braille-using Students, Level 3 (Grade 2) ..... 81
Mathematics for Braille-using Students, Level 3 (Grade 3) ..... 92
Mathematics for Braille-using Students, Level 4 (Grade 4) ..... 100
Mathematics for Braille-using Students, Level 4 (Grade 5) ..... 108
Mathematics for Braille-using Students, Level 4 (Grade 6) ..... 115
Mathematics for Partially Sighted Students, Introduction ..... 122
Mathematics for Partially Sighted Students, Level 3 (Grade 1) ..... 123
Mathematics for Partially Sighted Students, Level 3 (Grade 2) ..... 126
Mathematics for Partially Sighted Students, Level 3 (Grade 3) ..... 129
Mathematics for Partially Sighted Students, Leve1 4 (Grades 4, 5 and 6) ..... 131
Mathematics for Visually Impaired Students, Level 5 (Grades 7, 8 and 9) ..... 137
Mathematics for Visually Impaired Students, Leve1 6 (Grades 10, 11 and 12) ..... 141
SOCIAL STUDIES ..... 144
Levels 3 and 4 (Grades 1, 2, 3, 4, 5 and 6) ..... 145
Levels 5 and 6 (Grades 7, 8, 9, 10, 11 and 12) ..... 147
SCIENCE ..... 150
Levels 3 and 4 (Grades 1, 2, 3, 4, 5 and 6) ..... 151
Level 5 (Grades 7, 8 and 9) ..... 153
Level 6 (Grades 10, 11 and 12) ..... 156


## ACKNOWLEDGEMENTS

The following persons have contributed to various sections of the Curriculum Guide for the Visually Impaired. Their assistance is gratefully acknowledged.

The Special Education Curriculum Coordinating Committee:
Dr. R. Donald Cameron, Professor Emeritus, Special Education, University of Alberta, Edmonton;
Sandra Cameron, Principal, Lynn Lauren School, Wetaskiwin;
Fred Cartwright, Private Consultant, Lethbridge;
Brian Cook, Teacher, Hamilton Junior High School, Lethbridge;
Brian Henschel, Itinerant Teacher, Strathern Junior High School, Edmonton;
Marv Kroetsch, Assistant Principal, County of Strathcona, Sherwood Park;
Gwen Leavitt, Early Childhood Services Consultant, Alberta Education, Lethbridge;
Dr. Jean Moore, Coordinator, Special Education Curriculum Development, Alberta Education, Calgary (chairperson);
Donna Newton, Special Education Consultant, Edmonton Public School Board, Edmonton;
Roy Parry, Program Specialist, Calgary Public School Board, Calgary;
Isobel Reid, Parent Representative, Edmonton;
Betty Walpot, Editor, Special Education Curriculum Development, Alberta Education, Calgary;
Jim Ward, Itinerant Teacher for the Severely Handicapped, Calgary Separate School Board, Calgary.

The Visually Impaired Policy Committee:
Dr. Claudia Emes, Faculty of Physical Education, University of Calgary; Margaret Hatch, Consultant, Visually Impaired, Alberta Education, Edmonton; Dr. Ann Kennedy, Program Specialist, Calgary Board of Education;
Ed Lau, Consultant, Visually Impaired, Alberta Education, Calgary;
Donna Morrison, Early Childhoon Services Coordinator, Taber School Division 非6; Lilly-Anne Selby, Educational Psychologist, Edmonton;
Olwen Thomas, Librarian, Special Education Resource Centre, Calgary Board of Education;
Anne Wadsworth, Consultant, Visually Impaired, Alberta Education, Calgary; Leila West, Parent Representative, Sylvan Lake.

Ad-hoc Committee for the Academic Section:
Daphne Chutter, Braille Class Teacher, Waverley School, Edmonton;
Rodney Fay, Principal, McCauley School, Edmonton;
Colleen Kulchitsky, Braille Class Teacher, Waverley School, Edmonton;
Janet Parasynchuk, Consultant for the Visually Impaired, Edmonton Separate School Board;
Myron Podlog, Itinerant Teacher for the Visually Impaired, Calgary Board of Education;
Pat Seminiuk, Early Childhood Services Administrator, Edmonton Public School Board.
 $2 \cos =20$


## COMMUNICATION

Levels 1 and 2, Preschool

## INTRODUCTION

The regular preschool program is based on a multi-sensory developmental approach. This approach is most appropriate for meeting the needs of a visually impaired student. Long term goals and general objectives in a preschool program are the same for all children.

Teaching strategies which are directed towards meeting the needs of a visually impaired child can often benefit the entire group. Well planned, sequential and concrete learning experiences, on a one to one basis and in small and large groups, are appropriate for all children. However, the visually impaired child will require more individualized attention. An aide may be able to do a considerable amount of this work under the direction and guidance of the teacher.

Often a visually impaired child will be enrolled in a preschool program at a younger chronological age than his sighted peers. Some may spend two or even three years in a preschool program. This extended period provides an opportunity for the visually impaired child to grow in an understanding of everyday activities that other children learn through observation, and to develop concepts and behavior patterns essential to successful integration.

The preschool teacher is responsible for setting program goals, developing and determining strategies for program implementation and overseeing the program and its' ongoing evaluation. After initial assessments have been completed and resulting information gathered and reviewed the teacher will need to develop a plan for the child's program. The following are some factors which need to be considered in conjunction with assessment information.

1. The degree and effect of the visual impairment will influence the setting of objectives. For example, partially sighted children, who have residual vision, must have a program which encourages them to use their remaining vision
2. Scheduling provisions should allocate appropriate portions of the day for necessary individual instruction. For example, if the child's language development will not allow him to gain from story time involvement, this time may be most useful for individual instruction.
3. Encouragement to parents to become involved in planning their child's program. Parents and teacher working together to achieve mutually determined goals and objectives and sharing information facilitates greater continuity and effectiveness in all facets of the child's learning.
4. Coordination to ensure that the in-home program is consistent with the preschool program.
5. Coordination is also necessary if therapists, e.g. speech, physio- or occupational, are involved with the child in order that the various programs compliment each other.
6. Long range goals should include consideration of summer activities to maintain skills and extend experiences. Consideration should also be given to future school placement for the child.

The teacher is advised to contact special resource people for assistance. If the preschool program is located in an urban center and operated by a school system, there are usually itinerant teachers for the visually impaired within the system's special education department who provide this assistance. Teachers in all other programs may contact the consultant for the Visually Impaired and the consultant in Early Childhood Services in the Regional Offices of Alberta Education. Representatives for Handicapped Childrens' Services, the Canadian National Institute for the Blind, and the Public Health Unit may provide further assistance. It is also possible that a speech or occupational therapist may be involved in working directly with the child.

Most of the manipulative materials found in a preschool classroom are appropriate for use with the visually impaired child. Information about special equipment such as vests with different types of fasteners, a ball with a bell in it, story books which are in both braille and print, and assessment and program materials may be obtained from the itinerant teacher or consultant. Some equipment may be available on loan from the Materials Resource Centre, Alberta Education, Edmonton.

Although there are many different methods for developing an individualized education program, the prescriptive model has been particularily effective in working with visually impaired children. This model, in which goals are established and objectives set out for a short term with changes or revisions noted on the objectives sheet as they occur, facilitates frequent review of the child's progress and the effectiveness of the program. Progress can be noted, and techniques, activities or focus changed as required. A ring binder with sheets divided into the various developmental domains, general health and emotional/behavioral areas enables brief anecdotal comments to be made daily. These comments can then be reviewed quickly for any particular aspect of the child's development that is causing concern. This can be used to facilitate the monthly review and the setting of objectives for the next short term. When the aide has responsibility for much of the individualized work this record assists the teacher to keep current regarding the child's development and progress. Under the prescriptive model the teacher, aide and parents will meet on a monthly basis with informal meetings and communication throughout the year.

Communication and coordination are essential. Frequently this is accomplished through case conferences as well as ongoing notes or phone calls. It is advisable to indicate the approximate number of case conferences that will be held in the course of the child's preschool year, the purpose of these and the approximate time of the year, all in the initial planning. In this way people who could contribute or gain from such meetings can be notified well in advance and may provide assistance in determining agenda items.

The following objectives may assist a teacher in developing an individualized program. They are not intended to be a comprehensive listing of all areas involved in preschool communication but are suggestions which may be helpful in determining where to begin.

Manipulates objects and plays with them.

Makes simple choices and requests.

Initially gain child's attention by touch when using his name.

Use child's name when expecting him to listen or respond.

Use song "Where is (child's name)?" to the tune of Frere Jacques. Have child respond, "Here I am".

Draw child's attention to pleasurable objects: bells, squeeze toys initially; later wind up and push toys.

Assist child to develop associations between sound and object; allow for discovery time.

Request specific actions with various objects, e.g. tap drum three times.

Provide a choide of toys, activities, e.g. milk or juice, bell or car, sand box or doll house. Initially, once the child has made a choice, reinforce by immediate compliance.

Require further phrase extension, e.g. drink juice, please, play sandbox.

Use a consistent speech model in order that the child understands when he is to repeat.

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

The child:
Responds to simple requests and performs required actions.

Names and associates clothing with appropriate body parts.

Uses vocabulary which is appropriate to situation.

Use simple requests, e.g. stand up, come to me. Gradually extend to two and three step directions.

Use game activities, e.g. "Simon Says".

Play "Show me" game: foot, head, hand etc. Expand to let child give instructions; check to see if actions are correct.

Have child indicate appropriate body part for various garments, e.g. socks, mitten, hat, rings, shirt.

Expand to have child indicate body parts on teacher, peer or doll.

Provide opportunities for exploration of a variety of meaningful objects (bowls, shoes, spoons, etc.). Encourage language which is associated with the object and activity. Keep experiences at the concrete level. Initially reinforce appropriate self initiated speech.

Extend experiences to larger variety of objects and activities.

Note: A child may be displaying withdrawal symptoms if he babbles or uses meaningless language frequently. Do not ignore this behavior. Bring him back to reality by drawing his attention to some meaningful exchange or activity. Request assistance.

Wabash Guide.

Dress-up box which contains large size clothing.

Get a Wiggle On. Move it.

The child:

Demonstrates an awareness of written language and the process of recording the spoken word.

Extend vocabulary development by using comparisons: same and different, shapes, functions, textures, etc.

Provide opportunities for classificaiton of objects according to attributes, function, class, etc.

Provide opportunities for the child to distinguish between fantasy and real life situations.

Provide many opportunities for child the become involved with simple story books, e.g. touching, listening, page turning.

Involve blind child with twin vision books (available from M.R.C.). Teach child to open book, explore braille symbols, turn pages and discuss characters and action.

Use adhesive braille labels to identify objects which child frequently uses, e.g. chair, table, bed. Involve child in putting labels on these objects.

Involve partially sighted child with appropriate beginning books which have simple, clear illustrations. Select books which have good, bright colors and maximum contrast between figures. Discuss illustrations and encourage child to examine pictures for increasingly finer details.

Touch and Te11.

Large Print Catalogue for Story Books. Visual Efficiency Program.

Use the following story instruction techinque:

1. Select simple story, e.g. "Jack and Jill", rather than "Three Bears" to begin.
2. Prior to introducing story examine vocabulary to ensure that the child comprehends new words, e.g. build in missing vocabulary by use of concrete objects and direct experience.
3. Involve child in reading the story, feel of book, turning pages, feeling "bumps" (stress left to right progression in feeling braille), guessing what will happen, supplying a rhyming word, naming a character, etc.
4. Repeat story in relaxed atmosphere to improve understanding and enjoyment.
5. Strive for recall of story through use of questioning, dramatization, etc.

Provide opportunities for child to follow increasingly complex directions. Give directions which are purposeful.

The child:

Listens to and associates sounds with their sources.

Repeats simple songs, rhymes.

Provide sequential instructions that sometimes require a time lapse before the child carries out the request, e.g. "After recess take this to the office."

Have child locate sound sources, and associate name of source with sound, e.g. refrigerator, car.

When new sounds are heard give child opportunities to explore their sources: typewriter, air-conditioner, cuckoo clock, etc.

Go on listening walks, have child follow the sound of your voice and footsteps. Stop to listen to and discuss environmental sounds.

Have child follow other sounds, e.g. beeper ball, wind up toy.

Have child record nature sounds during listening walks and take these home to share with family.

Use similar techniques as for story introduction.

Use action songs and rhymes that are meaningful to the child, e.g. "That's What It's All About". Assist child through actions as necessary.

Play rhyming word games to reinforce and expand vocabulary. Ensure child understands meaning of words used.

Beeper ball.

Tape recorder.

The child:

Interacts with other children and cooperates with them.

Uses meaningful vocabulary which deals with sequences in daily life.

Demonstrates knowledge of name, address and phone number.

Introduce initial consonant sounds as child is ready.

Teach the alphabet song.
Encourage parallel play.
Encourage child to explore, share, take turns and respond to playmates' questions or comments.

Encourage sighted children to identify themselves when near or interacting with the
visually impaired child.
Encourage visually impaired child to ask questions re: identification of others and what they are doing.

Reinforce child's attempts at initiating verbal/social
interactions.
Provide ample opportunity to discuss the order of events, e.g. breakfast, school-time, lunch.

Relate present to what happened yesterday and will
happen tomorrow.
Encourage child to describe simple experiences after they have occurred.

Use dramatic play and role playing.

Play games which require this identification information.

The child:

Have the child phone home occasionally to reinforce understanding of use of phone number.

## COMMUNICATION

Leve1 3, Grades 1 - 3

## INTRODUCTION

The Level 3 Communication section is designed to assist the teacher to work with a visually impaired student in the regular classroom. Depending upon the degree of visual impairment it may be unrealistic to expect the visually impaired student to accomplish as much as other primary grade students in the usual three year period.

There are no special classes for partially sighted students. However, young braille-using students are generally enrolled in special classes for instruction. The braille class teacher is expected to know braille and to be able to operate the special equipment these students require. The teacher of a regular class who receives a braille-using student is not expected to know braille or to be able to operate the special equipment.

This Communication section addresses implementing the language arts program for a visually impaired student in the regular grade 1 to 3 classroom. Notes, strategies and references are provided to assist the teacher. The term visually impaired refers to both partially sighted and braille-using students.

The regular class teacher receiving a visually impaired student should be familiar with The Program of Studies for Elementary Schools (1978), the Alberta Elementary Language Arts Curriculum Guide (1978), "The Visually Impaired Student in the Reg'lar Classroom" section of the Special Education Handbook and the appropriate section of the curriculum for the visually impaired. Teachers who have a brailleusing student in their class are advised to examine the Waverley Project Manual as well. This is a program for Level 3 (primary grades) braille-using students in special classrooms which was developed in Edmonton.

The teacher is advised to contact an itinerant teacher for the visually impaired or the special education coordinator of the local school jurisdiction. Where such service is not available the teacher should contact a Consultant for the Visually Impaired, Alberta Education for assistance. Materials and equipment are available on a free loan basis from the Materials Resource Centre (M.R.C.), Alberta Education, Edmonton.

Attract the student's attention through the use of his name, when addressing him specifically, to avoid confusion.

Encourage the student to participate as a member of a group or class, and to listen and to follow group directions by providing positive reinforcement for such participation.

Select poems and stories which incorporate imagery from senses other than vision into listening activities. Emphasize this as a valid means of expression, e.g. select a poem which emphasizes the sound of the falling rain. Provide opportunity for discussion about smells and tactile sensations.

Familiarize the visually impaired student with taped materials and operation of the tape recorder. (Recorders and materials are available from the M.R.C.)

Explain to the braille-using student sounds which intrude, e.g. from the air-conditioner, and assist him to link sounds with the objects which produce them.

Provide opportunity for discussion to reinforce the student's concrete experiences and to assist in extending his meaningful vocabulary.

## A. Receptive Language

Analyze the content of materials for listening activities, to ensure that the brailleusing student understands the vocabulary before beginning the activity.

Note: Visually impaired students are frequently caught "off guard" by a greeting, comment or question coming from an unknown source. They are unsure of the speaker, and of whether the greeting or comment is meant for them or for someone else. Hence they may not respond or interact. This problem could be alleviated if classmates and staff members used the student's name and indicated their own names when addressing the student.

Use appropriate sections of the tape recorded Listen and Think Series available from the M.R.C. (with the entire class).

Be aware of the student's eye condition and acuity in order to adapt viewing activities appropriately for the partially sighted student. Discuss with the itinerant teacher. See "The Visually Impaired Student in the Regular Classroom", Section D. Planning and Classroom Management, \#6. Light Source and Seating Arrangements, and Section E. Meeting Educational Needs, \#7. Teaching Techniques and Modifications, which deals with use of the chalkboard, models and media.

Give particular consideration to the needs of the visually impaired student during preparation for the activity and in the follow up, in order to have him gain maximum benefit from viewing experiences. Provide opportunity for all visually impaired students to preview and investigate materials and equipment to be used in a demonstration or in an activity. For brailleusing students provide additional verbal descriptions and time for discussion.

Provide "hands-on" experience to supplement or to substitute for viewing such things as puppets, objects brought for "Show and Tell", etc.

Note: Most primary text-books are in large print. These should be adequate in print size for most partially sighted students.

However, some students may need further consideration relative to size and intensity of print. Special large print materials may be obtained from the M.R.C.

Have tests and worksheets prepared ahead of time, either using a primary print typewriter or a felt pen. Avoid using blue ditto sheets because the poor print quality and lack of contrast causes unnecessary difficulty for the partially sighted students.

## COMMUNICATION

Level 3 (Grades 1, 2 and 3)
A. Receptive Language

Note: 1. Partially sighted students should be encouraged to use their vision. Reading does not cause vision to deteriorate. The primary teacher has the important responsibility of assisting the student to use his limited vision effectively. Contact an itinerant teacher for help in developing a program for increasing visual efficiency.
2. Most visually impaired students read and write at a slower rate than their classmates. Therefore, tasks may need adapting so that the student can gain satisfaction from completing assignments.

Have the student choose his own best reading distance, even if this is unusually close to the print. Provide partially sighted students with a book rest. Vary activities to avoid fatigue from reading. Consider some compensatory exercises for relaxing tired neck and shoulder muscles.

As speed and fluency become more important, try to work individually with a slow reading visually impaired student rather than having him read aloud to the group.

Encourage the partially sighted student, who has prescribed reading glasses to wear them. Occasionally monitor the condition of the glasses, checking for scratched or dirty lenses and bent or broken frames.

Visual Efficiency Program.

Mangold book stand.

Obtain information from the itinerant teacher on the uses and limitations of the monocular distance aid, and how to assist the student who has this prescribed aid to use it effectively for viewing the chalkboard. Use the booklet "Monocular Mac" to explain the device to other students.

Assist the partially sighted student, through questioning and other techniques, to examine illustrations in readers and story books.

When possible select books which contain illustrations which the partially sighted students can see and enjoy.

Note: 1. The braille-using student, working from braille reading books which have been transcribed from the readers sighted classmates are using, will require more motivation and support in order that the brailled stories may be made meaningful and enjoyable for him. Also, he may experience problems in his reading as a result of infrequently used braille contractions. Regular class teachers should refer to the section on braille in the appendix of "The Visually Impaired Student in the Regular Classroom". Teachers should also discuss these problems with the student's braille instructor.

Monocular Mac.

The Teaching of Braille Reading.
2. As well as the "Language Master" and other devices, there are special aids which assist partially sighted students in reading, e.g. the Stokes place holder (obtainable from the M.R.C.) would be useful for the student who frequently loses his place in reading.

For introductory dictionary work provide students with appropriate large print or brailled primary dictionaries (available from the M.R.C.).

Provide additional practice with alphabetical order, essential to dictionary and other work, through the use of indexed word boxes (see Spelling section which follows).

Assist the student in selecting from the library those books which have good print intensity and size, e.b. black print on a non-glare white paper. Avoid unusual styles of printing. Check with the itinerant teacher for other sources of large print and brailled books for young children.

Language Master. Stokes place holder.

Speaking

Writing

Note: 1. Visually impaired students may not have an awareness of appropriate posture, gestures and facial expressions. They may need advice and assistance in achieving effective use of these in speaking activities. Participation in drama provides an excellent opportunity to develop skills which will enhance speaker effectiveness.
2. Personal space: In order to see people clearly the partially sighted student often tends to stand particularly close when conversing. Assist the student to gain an idea of reasonable space between people in conversation.
3. Encourage braille-using students to face the person or audience to whom they are speaking and to keep their heads up.

Note: In the initial stages of learning manuscript or cursive writing the partially sighted student invariably misses the details of letter and number formation from chalkboard demonstrations. Individual attention at this stage is essential. Work with the student at his desk or at the chalkboard.

## COMMUNICATION

Level 3 (Grades 1, 2 and 3)
B. Expressive Language

Once the student understands the correct formation of the letters check periodically for legibility and provide remedial exercises as necessary. See Examples of Illegibilities, page 68 of "The Elementary Language Arts Curriculum Guide". Limited vision may cause the student to tend towards certain of these, e.g. leaving the cursive "d" open, which could lead to confusion between "d" and "cl" in spelling and in reading what he has written.

If the partially sighted student's printing or writing wanders above or below the base line in his note books, this generally indicates that he is not seeing the lines sufficiently. Use the size of the student's own work as a guide to draw a master sheet of lines for writing and make copies for use in a binder.

If words are consistently poorly spaced in the student's printed or written work, suggest that he place a finger between words as he is writing until the spacing becomes regular.

If writing is untidy emphasize the correct method of joining letters within a word, see Difficult-Combinations, page 68 "Elementary Language Arts Curriculum Guide".

## COMMUNICATION

Level 3 (Grades 1, 2 and 3)
B. Expressive Language

OBJECTIVES |  | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

## Spelling

Note: The partially sighted student frequently has difficulties with spelling so assisting him to write legibly is extremely important in helping him to gain accurate images of words.

In the early primary grades use a commercially available triangular pencil grip to assist the partially sighted student with poor fine-motor control to achieve the proper pencil grasp.

Check with the itinerant teacher for information and assistance concerning the braille-using student's use of the brailler.

Encourage the students through praise, discussion and sensitive treatment of spelling in their written work to take pride in spelling correctly and assist them in forming a good base for future spelling.

See "Helping Children Learn to Spell", pages 71-75,
"Elementary Language Arts Curriculum Guide" for techniques.

For partially sighted students copy spelling list in black
felt pen. For braille-using
students provide brailled spelling lists for study.

Use pretests to guide the student to concentrate, during study time, on the words he does not know.

Use basic word lists to enable a student to develop writing power, as these words will give him a core vocabulary for written work.

For supplementary spelling have the visually impaired student select his own words. Have the partially sighted student write these correctly in felt pen, on index cards, and place them in a word box. Have braille-using students keep brailled words in word boxes.

Use games to encourage correct spelling, e.g. Scrabble.

Refer to "Guidelines for Helping Students Express Their Ideas in Writing", pages 5457, "Elementary Language Arts Curriculum Guide".

Encourage the use of imagery related to emotions, and the senses in written compositions.

Encourage creative effort and extension of vocabulary in the student's compositions. Treat spelling errors with sensitivity and do not focus on this during creative writing time. Write words requested by visually impaired students in felt pen or braille on index cards for their word boxes instead of putting them on the chalkboard. Refer back to the spelling section.

Waverley Project.

Braille Scrabble Game.

Provide individual assistance to teach punctuation marks and their uses as necessary.

Note: Skill in the organization of information is particularly important to the visually impaired student. Skill in selecting main ideas, sequencing, and selecting key words from written and spoken material should be fostered and developed. Because of slower reading and writing speeds the visually impaired student must rely increasingly upon notes which are necessarily brief and precise.

## COMMUNICATION

Level 4, Grades $4-6$

## INTRODUCTION

The objectives of the Alberta Elementary Language Arts Curriculum Guide (1978) are appropriate for visually impaired students in the upper elementary grades. Therefore, this Communication section is intended to be used with the above publication. Because of the cumulative nature of the content and skills recommended in the Language Arts program for grades 4, 5 and 6, this section is organized for use with the "Elementary Language Arts Content and Skill" foldout chart for grade 6. It is essential that teachers read the "The Visually Impaired Student in the Regular Classroom" section of the Special Education Handbook before implementing this section of the curriculum.

The visually impaired student should participate fully in the regular curriculum and school program. The aim of this section is to alert the teacher to the special needs of the visually impaired student. It addresses objectives which may require special attention when planning and providing instruction for the visually impaired student. Notes, strategies, and references are provided to assist the teacher.

The teacher is advised to contact an itinerant teacher for the visually impaired or special education coordinator provided by the local school jurisdiction. Where such service is not available, the teacher should contact a Consultant for the Visually Impaired, Alberta Education. These resource personnel are able to provide information and assistance. Materials and equipment are available on a free loan basis from the Materials Resource Centre (M.R.C.), Alberta Education, Edmonton.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| 1. Elements common to |  |  |
| The student: |  |  |
| Use appropriate tapes from the <br> American Printing House for | Listen and Think Tape <br> Series. |  |

## COMMUNICATION

Level 4 (Grades 4, 5 and 6)
A. Listening and Viewing

OBJECTIVES

The student:

Demonstrates understanding of the relationships between listener/speaker.

Interprets facial expressions,gestures ...

Demonstrates awareness of contribution to meaning of design, special effects,...

Provide follow-up activities, e.g. discussion, a quiz or role playing, based on the content of a tape recording.

Assist the student toward independent use of the tape recorder and attachments. Encourage use of the variable speed control mechanism on the tape recorder to increase the student's listening speed.

Intersperse periods of listening with other activities.

Ensure that the visually impaired student faces the speaker.

Use the student's name when addressing him or wishing him to respond.

Encourage the student to use auditory cues, e.g. tone, volume, pitch and pauses to compensate for any inability to interpret visual cues when he is in conversation with others.

Enable the student to obtain an understanding of visual effects such as costumes and sets for school plays, etc. through discussion and tactile exploration prior to the actual staging. Provide a description of the plot or an opportunity for the student to read or listen to a reading of the play before he attends the performance.
3. Elements specific to listening/viewing

The student:

Listens in widening contexts using the following forms ...

Continues to demonstrate growth in auditory memory.

Note: Not all forms are appropriate, e.g. puppets for braille-using students.

Use questioning, discussion, role playing and other techniques to ensure that the student understands the content before he is asked to memorize portions of poems or plays.

## 1. Elements common to <br> Language Arts

The student:
Applies reading and viewing skills ... - reading

For reading from chalkboard, overhead projection and wall charts:

- avoid glare
- allow the student to move to a good viewing position
- verbalize material as it is being placed on the chalkboard or screen
- write boldly and clearly
- provide the student with a desk copy of chalkboard notes when possible.

For reading from print avoid the use of ditto sheets. Provide felt penned copies when possible. If ditto sheets must be used occasionally, select an intense copy for the partially sighted student and place it into a clear yellow plastic page protector to provide more clarity. Obtain yellow page protectors from the M.R.C.

Obtain reading materials in the appropriate format for the student: braille, large print or tape recorded.

Allow for student's slower reading speed by selecting from readings assigned to the class.

Consider use of magnetic place holders for students who frequently lose their place when reading.

Pressure sensitized paper.

The student:
2. Elements common to receptive language

Adjust rate of reading ...

Permit and encourage the student's use of a prescribed magnifier and/or a monocular telescopic aid in the classroom.

Use explanations, as for print materials, with the student who has braille charts and diagrams. Provide verbal description for pictures omitted from braille books. Advise student in advance of the print page numbers for reading in order that he may have the correct braille volume ready for the lesson. Allow for slower reading speed by selecting from assigned readings. Refer to the resource person and "The Visually Impaired Student in the Classroom" when working with braille-users. Provide opportunity for Optacon-users to read a variety of good quality print material with this equipment.

Note: Braille-users and partially sighted students will be reading at slower rates. Reduce amount to be read by carefully selecting from reading assignments. Oral reading may not be fluent. Discuss speed reading techniques with resource person.
B. Reading and Viewing

Reads increasingly complex material, identifies and infers relationships ...

Continues to demonstrate ...

Uses reference books.

Note: New vocabulary should be provided ahead of the lesson for conversion to braille or large print for the student's use.

When presenting a new key word, spell it aloud to assist the visually impaired student.

Note: Concepts of distance, size and time are dependent upon the student's experience with these.

Check the student's perception of distance, size and time as these occur in the reading.

Note: Braille book formats vary from print. The transcriber's name and notes will be added. The body of text books will contain the print text page number as well as the braille page number. Provide the student with the print page numbers for the next lesson in order that he will have the appropriate braille volume ready.

Note: Guide words and pronunciation keys in braille dictionaries may cause difficulty. Guide words are located at the bottom of the page in braille dictionaries.

The student:

Locates information.
3. Elements specific to reading

Reads a widening variety of material.

Continues to apply phonetic and structural analysis to decode ...

When print charts or diagrams are complicated, information may be simplified by having portions of the information placed on several charts or diagrams.

Note: The variety of braille material is limited, e.g. there are few recipe, poetry, joke books or children's magazines available in braille. Poetry formats may differ in the braille books. Also do not assume that the student knows particular formats, e.g. invitation, friendly or business letter.

Note: Braille contractions may cause particular problems in phonetic analysis,
e.g. braille and print syllables may not always match as a braille contraction may interfere. For example, the brailled word "nation" is formed by two configurations, one for " $n$ " and one for "ation".

See "The Visually Impaired Student in the Regular Classroom" (Special Education Handbook).

## 1. Elements common to <br> Language Arts

The student:
Demonstrates continuing growth in oral vocabulary.
2. Elements common to expressive language

Demonstrates continuing growth in oral vocabulary.. - effective figurative language.

## 3. Elements specific to speaking

Continues to demonstrate control of ...

- adjusting volume ...

Periodically monitor understanding through discussion with the student, as lack of experience may result in him using vocabulary which he does not fully comprehend.

Encourage use of imagery which is valid and meaningful to the student. Encourage him to use description based upon sound, feel, smell, etc. which are related to senses other than vision.

Provide feedback to the student on mannerisms, volume, pitch and rate of speech to compensate for lack of visual cues.

Encourage the student to participate in conversations through discussion of appropriate behaviors and the rationale for them, and by provision of opportunities for practice and feedback.

COMMUNICATION
Level 4 (Grades 4, 5 and 6)
C. Speaking

| OBJECTIVES | TEACHING STRATEGIES |
| :---: | :---: |
| The student: |  |
| Uses appropriate facial expressions ... | Assist the student to effectively use facial expressions, gestures and posture in speaking. |
| Demonstrates accepted social behaviors ... | Have the student raise his hand when wishing to ask questions or address the teacher. |
|  | Have the student face the audience when speaking. |
|  | When initiating a conversation with an individual in a group situation have the visually impaired student first name the person to whom he is speaking thereby locating and alerting the person he is addressing. |

1. Elements common to the Language Arts

The student:
Applies writing skills learned ...
2. Elements common to expressive language

Organizes information from a widening variety of sources ...

Note: Visually impaired students may begin to learn how to type when ready, usually at about grade 4. Tape recorded typing courses are available from the M.R.C.

Have partially sighted students write with pencil or felt pen as necessary. Have braille-using students braille notes for their own use with a brailler or slate and stylus and type assignments for submission to the teacher.

Have visually impaired students prepare a braille or felt penned outline as a guide if making tape recorded reports.

Instruct the student in required formats. Provide braille or large print examples.

Emphasize the importance of accurate work. Praise attempts to produce correct work.

Assist the student to learn ways of proof-reading his own work. Use short, success oriented practice sessions.

Emphasize the use of resource people, interviews, radio, and audio rather than visual media.
3. Elements specific to writing

Writes in widening contexts ...

Note: Monitor the amount of time the student spends on assigned homework. Reduction in quantity through judicious selection may be necessary if the student is spending an inordinate amount of time on homework becaise of time involved in setting up equipment or because of his slower reading and writing speeds.

Because social interaction is of prime importance, ensure that the student does not spend recesses and noon hours completing class assignments.

Check that the student has a supply of material (braille paper) for writing.

Instruct student in specific formats.

Use resource person for assistance relative to formats, e.g. in poetry where formats in braille vary from print formats.

Provide opportunity for practice of specific formats. Direct student's attention to similarities and differences.

Obtain and provide large print and interlined braille examples for reference and to be used as models by the student.

The student:

Demonstrates ability to use standard forms of manuscript and cursive writing ...

Uses and extends basic spelling vocabulary.

Applies proof-reading skills ...

Note: The braille-using student should learn to sign his name with pencil or pen. If the student has learned to sign his name, have him sign all work submitted in order that he will maintain this skill. If not, he will require special assistance to learn this skill.

Note: Spelling may pose serious difficulty for partially sighted students because they lack sufficient visual reinforcement of correct forms, and for brailleusing students because of the nature of braille which involves many contractions, e.g. the braille symbol for $k$ is also the work $\mathrm{k}-\mathrm{n}-\mathrm{o}$-w-l-e-d-g-e.

Supply vocabulary lists of key words to students prior to new units of study in all subject areas.

Encourage accuracy.
Refer to handbook section and request aid if necessary.

Encourage the student to learn and apply some proofreading techniques. Use small amounts of material for practice and to ensure success.

Encourage Optacon-users to use the optacon occasionally in proof-reading short passages of work which they have typed.

Signature guide. Raised line paper.

| OBJECTIVES | TEACHING STRATEGIES |
| :---: | :---: |
| The student: |  |
| Uses dictionary | Ensure that the student has a large print or braille dictionary. |
|  | Check the student's ability level to determine the type and amount of instruction required. |
|  | Seek assistance or advice in skill building for brailleusing students. |
| Prepares a bibliography | Obtain and provide large print or braille example of a bibliography as a model and a reference for the student. |
|  | Instruct in both format and rationale for the preparation of bibliographies. |
|  | Direct student's attention to bibliographies in other books. |

## COMMUNICATION

Level 5, Grades 7 - 9

## INTRODUCTION

The objectives of the Alberta Education Language Arts Curriculum Guide for Junior High Schools (1978) are appropriate for visually impaired students. Therefore, this Communication section is intended for use with the above publication. Headings, numbers and letters correspond with those in the regular curriculum, pages $10-21$. It is essential that teachers read "The Visually Impaired Student in the Regular Classroom" section of the Special Education Handbook before implementing this Communication section.

The visually impaired student should participate fully in the regular curriculum and school program. The aim of this section is to alert the teacher to the special needs of the visually impaired student. It addresses objectives which may require special attention when planning and providing instruction for the visually impaired student. Notes, strategies, and materials are provided to assist the teacher.

The teacher is advised to contact an itinerant teacher for the visually impaired or the special education coordinator of the local school jurisdiction. Where such service is not available the teacher should contact a Consultant for the Visually Impaired, Alberta Education. These resource personnel are able to provide information and assistance. Materials and equipment may be obtained on a free loan basis from the Materials Resource Centre (M.R.C.), Alberta Education, Edmonton.

## OBJECTIVES

PART 1 THE COMMUNICATION PROCESS

The student:

2c Regular objectives plus: Identifies the appropriateness of special tools and equipment, e.g. Optacon, tape recorder, brailler, in setting up communication situations.

5b Regular objective plus: Demonstrates ability to produce error-free typewritten work, e.g.

- appropriate format
- spelling
- sentence structure
- punctuation.

TEACHING STRATEGIES

Give attention to the development and/or extension of the skills required to use special equipment separately or in conjunction with each other to improve communication,
e.g. use of tape recorder with foot pedal switch in conjunction with typewriter. Contact resource person if student experiences difficulty.

Provide lists of core vocabulary pertinent to the subject unit prior to study of the unit.

Ensure that the student has assistance in proofreading.

Encourage student to review drafts of work or to have typewritten drafts read back in order that repetitions are corrected prior to submission of assignments. Consider use of buddy system.

Note: Appropriate braille or large print examples to illustrate formats, sentence structure and the use of punctuation are helpful in instruction and provide the student with a reliable reference for study and review.

Spelling Research and Practice: A Unified Approach, Focus on Exceptional Children (1979), 12, No. 2, 1-16.
Ves Thomas Spelling.

## PART 2 THE SYSTEM OF LANGUAGE

The student:
1 Regular objective plus: Demonstrates ability to recognize correspondence between word in print and oral vocabulary.

Note: 1. Advance preparation will be required if materials for study are other than the prescribed text book. Optacon users may be given short print articles to read. These should be given to the student in advance of the lesson as the visually impaired student will require more time to set up this reading equipment.
Materials might also be brailled or converted to large print for the student.
2. Braille syllabication frequently differs from print syllabication, e.g. -ing and -ed have special symbols. The word "knowledge" employs only the symbol for " $k$ ", beneath the lowered " b " followed by " $n$ ", and nation is " $n$ " followed by "ation" symbol.

To compensate for the student's slower reading speed assign shorter dictionary exercises. (Diacritical marks pose special problems for the visually impaired student.)

Chalkboard - Read information aloud as it is placed on the board. (The buddy system could be employed to provide an accurate copy of lengthy chalkboard notes. The visually impaired student is responsible for having someone read these notes to him for review purposes. This reading may result in his incorporating additional information into his own point form notes.)

Pressure sensitized paper.

PART 2 THE SYSTEM OF LANGUAGE continued

The student:

Handouts - Make original or
clear copies of materials handed to regular students available to the visually impaired student to read or to have read to him. Make essential materials available in braille for braille-using students.

Student notes - Periodically have the braille-using student read and discuss his notes to ensure that he has the essential information.
OBJECTIVES

AND COMPOSITION
The student:
1 Regular objective plus: Locates alternative sources of information and develops specific techniques for using them.

2 Regular objective plus: Uses appropriate adaptive tools in research.

TEACHING STRATEGIES

Encourage student to make contributions to class discussion based on listening to radio and television news and special programs, e.g. documentaries.

Ensure that the student has a dictionary and a thesaurus in the appropriate braille or large print format. These are available from the M.R.C.

Provide guidance for the study of newspapers, periodicals, and pamphlets. Time extensions for assignments will be necessary.

Alert the visually impaired student to information service available from the public library and assist the student to learn to use this service.

Note: Several sets of information on one chart or diagram e.g. a weather map, may be complicated for the visually impaired student. Information may be simplified by reorganizing it on to several separate charts or diagrams.

In reading assignments, when students are identifying main ideas or locating specific details, provide snaller amounts of material or provide extra time to compensate for the visually impaired student's slower reading speed.

PART 3 RESEARCH, STUDY AND COMPOSITION continued

The student:

4 Regular objective plus: Demonstrates ability to make concise notes for study purposes.

Require the visually impaired student to make concise and meaningful notes during the lesson. These point form notes should include subject, date, topic, main ideas and supporting details.

Supplement the visually impaired student's notes with a tape recording or a carbon copy of the teacher's or buddy's notes.

Require the visually impaired student to develop written or brailled outlines for all typed or tape recorded. compositions or reports.

Note: Debating is a skill which enables visually impaired students to function on par with classmates and might be considered as a regular part of the course rather than an option.

Note: In illustrating ideas, a display of real objects, the use of sound or the development of tactile models would be more appropriate for a braille-using student than using pictures and posters.

In plotting information, encourage the braille-using student to use geo-boards, braille graph paper, or wire screening. Large print graph paper is available from the M.R.C. for partially sighted students.

The student:

Emphasize the value of correctly written communication in a variety of formats.

PART 4 EXPRESSED THOUGHTS AND VALUES

The student:

Encourage the student to explore tactile and auditory stimuli to extend personal experiences of the physical world.

Note: The visually impaired student's comprehension of what he reads is adversely affected by gaps in his experience. Many gaps can be detected through discussion with the student. Although he may provide the anticipated response, discussion will clarify the student's knowledge for the teacher. The student can learn through direct experience, description and discussion.

Note: Related to the awareness of changing values is the necessity for the visually impaired student to learn about current styles in clothing, hair styles and the use of cosmetics for specific occasions. Class time should be provided for discussion. See Living/Vocational Skills section.

If possible use a store display mannequin for tactual exploration of clothing styles, e.g. hem lines, collar styles.

PART 4 EXPRESSED THOUGHTS AND VALUES continued

The student:

Make use of the raised line drawing kit for diagramming the structure of short stories and novels, e.g. the risingfalling action.

Employ description and discussion to explain staging, lighting effects, etc. Use a diorama to indicate dimertsion, space and balance.

Sewell Raised Drawing Kit.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

PART 1 THE COMMUNICATION PROCESS

The student:

2b Regular objectives plus: Uses special adaptive tools and equipment, e.g. Optacon, tape recorder, brailler appropriately to create effective communication situations involving self and sighted.

3b Regular objective plus: Demonstrates knowledge that signs and symbols are used for everyday purposes.

Demonstrates knowledge of braille communication mode used by deaf-blind.

Describes deaf-blind braille communication to sighted peers.

Provide encouragement to reinforce student's motivation. Have student discuss and explain how he will organize tools and materials for particular communication situations, e.g. coordinating typewriter and Optacon.

Tcam student with a sighted buddy for discussion and exploration of signs which can be perceived tactually, e.g. the distinctive shapes of stop and yield signs.

Note: This section of the regular curriculum would provide an opportunity for the braille-user, who has knowledge of the braille code and who may have an interest in other codes, to explore and to assume a leadership role in class discussion.

Encourage the student to research and share knowledge and to act as a resource person for the class when possible.

Have the student assume leadership role in researching literature, e.g. Helen Keller, or braille code, or have student organize a demonstration of communication equipment.

## PART 1 THE COMMUNICATION

 PROCESS continuedThe student:

5a Regular objective plus: Demonstrates increasing ability in using appropriate gestures and volume when speaking in a variety of situations.

5b Regular objective plus: Uses correct spelling in typewritten work.

Uses word lists in preparation for a unit of work.

Demonstrates awareness of need to use errorfree sentences. (Makes corrections when first copy is read back by a sighted peer.)

Demonstrates ability to use varied vocabulary and to avoid overworking words.

Encourage student to interview someone who works with the deaf-blind and to report back to the class.

Provide constructive feedback on appropriateness of the blind speaker's gestures and volume.

Encourage braille-using students to describe experiences by using non-visual imagery.

Continually stress the value of correctness in written communication with the sighted.

Provide lists of core vocabulary pertinent to units of study in all subject areas prior to study of the particular unit.

Ensure that the writer, not the proof-reader is making corrections.

Ensure that the student has assistance in proof-reading.

Encourage student to review drafts of work, or to have typewritten drafts read back, to check for repetition, enabling him to correct work prior to submission of assignments. Consider use of buddy system.

## OBJECTIVES

PART 2 THE SYSTEM OF LANGUAGE

The student:

1

TEACHING STRATEGIES

Note: 1. Advance preparation will be required if materials for study are other than the prescribed text book. Optacon users may be given short print articles to read. These should be given to the student in advance of the lesson as the visually impaired student will require more time to set up equipment and read the material. Materials might also be brailled or converted to large print for the student.
2. Braille syllabication frequently differs from print syllabication, e.g. -ing and -ed have special symbols, knowledge - symbol "k" only, beneath - lowered "b" followed by "n", and nation - " $n$ " followed by "ation" symbol.

To compensate for the student's slower reading speed assign shorter dictionary exercises. (Diacritical marks pose special problems for the visually impaired student.)

Chalkboard - Read lesson information aloud as it is placed on the board. Buddy system could be employed to provide an accurate copy of lengthy chalkboard notes. The visually impaired student is responsible for having someone read these notes to him for review purposes. This reading may result in his incorporating additional information in-

Pressure sensitized paper.

PART 2 THE SYSTEM OF LANGUAGE continued

The student:
to his own notes. Partially sighted students may use a monocular distance aid and should be free to move up to the chalkboard as necessary to read notes.

Handouts - Make original or clear copies of materials handed to regular students available to the visually impaired student to read or to have read to him. Make essential materials available in braille for braille-using students.

Student notes - Periodically have the braille-using student read and discuss his notes to ensure that he has the essential information.

|  |  |  |
| :---: | :---: | :---: |
| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |

PART 3 RESEARCH, STUDY AND COMPOSITION

The student:

1 Regular objective plus: Identifies the special purposes of various sources of information and the function of their parts,
e.g. a) table of contents
b) index
c) preface
d) glossary
e) periodicals and pamphlets
f) biographical information
g) indexes to reference materials (card catalogue, Reader's Guide to Periodical Literature)
h) appendices.

Demonstrates increased proficiency in using print sources for research.

Emphasize the usefulness of research for study purposes by discussion with the individual student and in a small group setting.

Provide time and encouragement for student use of the library to facilitate orientation and practice in locating materials.

Encourage student to use tools and equipment for research, e.g. have Optacon users reverse camera lens to read card catalogue.

Provide guidance for the study of newspapers, periodicals, and pamphlets. (Time extensions will be necessary.)

Note: A braille-using student may use the buddy system or an Optacon. A partially sighted student may use the buddy system, a closed circuit television reader or other magnifying device.

Alert the visually impaired student to information services available from the public library and assist the student to learn to use these services.

PART 3 RESEARCH, STUDY AND COMPOSITION continued

The student:
Uses sighted guidance for research purposes.

2 Regular objective plus: Identifies and combines different kinds of information from different sources using all human and media resources at his disposal, e.g. sighted guidance, teacher consultation, Materials Resource Centre.

Discusses the possible sources of information with teacher before beginning to compose.

Requests time extension if required.

4 Regular objective plus: Demonstrates ability to make concise notes in a variety of situations and for various purposes.

Provide sighted guidance to assist the student in research when necessary.

Encourage the student to mobilize all necessary resources available to search for appropriate information.

Consult with the student regarding books on the class reading list, and their availability in the appropriate format. Assist the student to select those books which will provide the most relevant information cosidering the student's slow reading speed.

Advise the student concerning sources of information before he begins to compose.

Encourage student to make notes for personal use as well as for study purposes.

Require the visually impaired student ot make meaningful point form notes during the lesson. These notes should include subject, date, topic, main ideas, and supporting details.

PART 3 RESEARCH, STUDY AND COMPOSITION continued

The student:

Require that visually impaired students develop outlines, in appropriate formats for their own use, for all tape recorded compositions or reports and that they submit typed copies of these outlines with their tape recorded reports. Provide honest feedback and, if the student fails to benefit from the feedback
in subsequent reports, restrict the use of the tape recorder for this purpose.

Note: Debating is a skill which enables visually impaired students to function on a par with classmates and might be considered as a regular part of the course rather than an option.

Note: In illustrating ideas, a display of real objects, the use of sound or the development of tactile models would be more appropriate for the braille-using student than using pictures and posters.

In plotting information, encourage the braille-using student to use geo-boards, braille graph paper or wire screening available through the Materials Resource Centre.

## OBJECTIVES

PART 4 EXPRESSED THOUGHTS

## AND VALUES

The student:
lb Regular objectives plus: Shares perceptions of human problems in literature.

1 d

5a

Provide for formal and informal group discussion of human relationships between characters who different needs and abilities.

Review strategies for Part 3, number 4 of this guide.

Encourage student to explore tactile and auditory stimuli to extend personal experiences of the physical world.

Note: Related to the awareness of changing values is the necessity for the visually impaired student to learn about current styles in clothing, hair styles and the use of cosmetics for specific occasions. Class time should be provided for discussion.

See Living/Vocational Skills section.

If possible use a store display mannequin for tactual exploration of clothing styles, e.g. hem lines, collar styles etc.

Connies New Eyes. Butterflies Are Free.

If You Could See
What I Hear.
The Miracle Worker.

Emma and I.

PART 4 EXPRESSED THOUGHTS
AND VALUES continued

The student:

5c Regular objectives plus: Identifies elements of setting and relates these to his experiences.

5j Utilizes discussion and tactual stimuli to gain idea of visual devices.

Encourage group discussion of setting, especially if literary description contains visual references.

Employ description and discussion to explain staging, lighting effects etc. Use a diorama to indicate dimension, space and balance.
OBJECTIVES
PART 1 THE COMMUNICATION
PROCESS continued

The student:

2a Regular objectives plus: Analyzes communication situations to identify and utilize special tools and equipment to appeal to various audiences.

3a Regular objectives plus: Demonstrates awareness of the importance of personal space in oral communication.

Manipulates appropriate mechanical and electronic devices to achieve effective communication.

Encourage student to use special tools and equipment, e.g. Optacon, tape recorder and typewriter for effective communication with a variety of audiences.

Provide feedback on student's use of personal space when speaking.

Ensure that the student participates fully in debates as this is an area in which visual impairment does not affect performance.

Require the visually impaired student to submit essays which may be shorther than those submitted by regular students,
but in which the quality of
thought should be comparable.

Provide lists of core vocabulary pertinent to the subject unit prior to study of the unit.

Ensure that the student has assistance in proof-reading.

PART 1 THE COMMUNICATION PROCESS continued

The student:

Encourage student to review drafts of work or to have typewritten drafts read back to check for repetition enabling him to correct work prior to submission of assignments. Consider use of buddy system.

Continually stress the value of correctness in written communications with the sighted.

Ensure that the writer, not the proof-reader, is making the corrections.
OBJECTIVES LANGUAGE

The student:
lb Regular objective plus: Uses appropriate punctuation in typewritten work.
$2 b, c$, and $d$

5

Encourage student to use proof-reading techniques involving sighted guidance.

Encourage student to seek help from resource person.

Chalkboard - Read information aloud as it is placed on the board. Employ buddy system to provide an accurate copy of lengthy chalkboard notes.

Handouts - Make original or clear copies of materials handed to regular students available to the visually impaired student to read or to have read to him. Make essential materials available in braille for braille-using students.

Student notes - Have the braille-using student read and discuss his notes to ensure that he has the essential information.

Pressure sensitized paper.
OBJECTIVES
PART 3 RESEARCH, STUDY
AND COMPOSITION
The student:
la, b, c, and $d$

PART 3 RESEARCH, STUDY AND COMPOSITION continued

The student:
2 Regular objectives plus: Relates own experiences to experiences described in literature.

3 Regular objectives plus: Discusses materials with sighted person to help in assessing validity of information.

5e Regular objectives plus: Makes first draft from an outline using braille or a tape recorder.

Reviews and corrects draft for presentation.

Encourage the student to mobilize all necessary resources available to search for appropriate information.

Consult with the student regarding books on the class reading list, and their availability in the appropriate format. Assist the student in selecting those books which will provide the most relevant information considering the students slow reading speed.

Advise the student concerning sources of information before he begins to compose.

Provide opportunity for the visually impaired student to discuss illustrative materials with the teacher or with sighted peers.

Have the partially sighted student make handwritten or typewritten first drafts. See strategies Part 3, 非 for grade 8 students.

PART 4 EXPRESSED THOUGHTS AND VALUES

The student:
$1 b$ and $c$

2 Regular objectives plus: Relates own experiences to experiences described in literature.

4 Regular objectives plus: Participates in the staging of drama productions.

5 Regular objectives plus: Utilizes discussion and tactual stimuli to gain idea of visual devices.

Provide for formal and informal group discussion of human relationships between characters who have different needs and abilities.

Ensure that the student is involved in a meaningful way in any staged production.

Make use of the raised line drawing kit for diagramming the structure of short stories and novels, e.g. rising-falling action.

Employ description and discussion to illustrate staging or lighting effects. Use dioramas to indicate dimension, space and balance.

Emma and I.

If You Could See What I Hear.

Debby.
Elizabeth.
Miracle Worker.

To Catch An Angel.
Butterflies Are Free.
Concept Development:
The Egg; What Do You Do When You Meet A Blind Person? (films).

Sewell Raised Line Drawing Kit.

Level 6, Grades 10 - 12

## INTRODUCTION

The objectives of the Alberta Education Senior High School Language Arts Curriculum are appropriate for visually impaired students. Therefore, this Communication section is intended for use with the regular curriculum. It is essential that teachers read "The Visually Impaired Student in the Regular Classroom" section of the Special Education Handbook before implementing this communication section.

The visually impaired student should participate fully in the regular curriculum and school program. The aim of this Communication section is to alert the teacher to the special needs of the visually impaired student and to address aspects of the program which may require special attention when planning for and providing instruction.

The teacher who has a visually impaired student in the classroom is advised to contact an itinerant teacher for the visually impaired, or a special education coordinator provided by the local school jurisdiction. Where such service is not available the teacher should contact a Consultant for the Visually Impaired, Alberta Education. These resource personnel are able to provide information and assistance. Materials and equipment may be obtained on a free loan basis from the Materials Resource Centre, Alberta Education, Edmonton.

The student will need:

1. acceptance and positive reinforcement from the teacher;
2. the use of specialized communication strategies, e.g. auditory learning, which may also be useful to other students in the class.

The teacher and resource personnel should work together so that the visually impaired student will:

1. develop a range of approaches enabling him to initiate meaningful relationships with others;
2. develop and extend his communication skills, e.g. braille, typing, use of the Optacon, or use of the closed circuit television reader or other reading devices;
3. develop ability to adapt to new situations by learning innovative ways of employing his skills and special equipment;
4. assume increasing responsibility for obtaining materials and making decisions about his work;
5. develop efficient work habits;
6. develop increasing competence and self-reliance in communications.

The student should be expected to:

1. participate in all classroom activities;
2. demonstrate the same quality of work and effort as his classmates;
3. complete work accurately within a time period determined by student and teacher;
4. make his needs known if he is experiencing problems with materials or requires extra time;
5. use independent study habits, and make his own arrangements for necessary resources and assistance.

The teacher should:

1. vary the resources and approaches indicated in the regular curriculum, in order that the visually impaired student may participate fully with sighted peers;
2. arrange to provide time on a regular basis for discussion with the student;
3. cooperate with the student and the resource person at the beginning of the term to organize the student's work space to accommodate special materials and equipment;
4. acknowledge the visually impaired student's slower reading speed through increasing the time allotted for an assignment, or by shortening the assignment through careful selection which would still test the student's knowledge and ability;
5. plan ahead so that the teacher-made materials may be converted to the appropriate format, e.g. braille;
6. exercise judgement as to whether certain materials warrant time-consuming conversion to a more appropriate format for the visually impaired student. Occassionally, provisions can be made within the classroom to accomplish the same purpose, e.g. a classmate might read a magazine article to the student;
7. use the visually impaired student's name when directing him specifically to listen or to respond;
8. place the onus on the student to examine an assignment as soon as it is given and to assess the availability of materials needed to complete the work. For example, at an appropriate time the student should discuss with the teacher any adjustments which may have to be made because of difficulties encountered Changes agreed to by the teacher and student would then form an informal contract.

## SPECIALIZED STRATEGIES

## Receptive Communication

In teaching listening skills, the teacher should encourage the student to:

1. increase listening speed and effectiveness when using the modified tape recorder and attachments;
2. use the radio and television to keep abreast of current events and arrange for individual and group discussion of programs and events;
3. employ critical listening skills by exposing the student ot a variety of oral presentations and subsequent discussion of them;
4. demonstrate attending behavior appropriate to his age and peer group.

In teaching reading skills, the teacher should:

1. expect increasing independence in the student's selection of equipment and methods for obtaining the message from print (student options may include Optacon, closed circuit television reader, speed braille reading or utilization of reader service);
2. allow for the student's slower reading speed by assigning shorter reading assignments.

In using media, the teacher should:

1. provide verbal descriptions to accompany visual media, e.g. chalkboards, film strips;
2. use the student as a resource person to determine the most appropriate method of presentation.

## Expressive Communication

In teaching oral language skills, the teacher should expect the student to:

1. face the audience and to exhibit appropriate gestures and posture when speaking;
2. participate fully in student organizations and school functions involving speaking;
3. show consideration for others by allowing others to express their points of view, expressing interest in the other person's comments, and by directing questions toward others in the group.

In teaching writing skills, the teacher should:

1. provide opportunities for the student to write for himself and a variety of audiences, and to use appropriate tools and equipment (writing for himslef and others might include personal reminders and notes by slate and stylus, or assignments and letters by typewriter);
2. encourage the student to improve typing speed and accuracy for better communication with the sighted.

MATHEMATICS

PRE-ACADEMIC

Levels 1 and 2, Preschool

## INTRODUCTION

The preschool program is based on a multi-sensory developmental approach. Many of the activities are dependent upon vision. The visually impaired preschooler cannot assimilate information presented visually. Emphasis must therefore be placed on auditory and tactual modalities but partially sighted children should be encouraged to use their residual vision to the maximum.

Listed below are strategies for assisting children to develop auditory and tactual skills, activities to stimulate the use of residual vision, and suggestions for integrating visual, auditory and fine motor competencies. The olfactory and gustatory senses should not be overlooked. Opportunities must also be provided for memory training and experiences involving seriation, causation and other cognitive tasks.

Activities in the preschool program should not be viewed as pre-requisites for specific academic disciplines to be presented in grade one. Concepts taught should be based on the wider sphere of intellectual development. These concepts include discrimination and labelling of objects, and recognition of relationships based on a variety of perceptual and functional similarities and differences.

The activities planned to develop such concepts should be meaningful. For example, sorting cutlery into knives, forks and spoons for different sections of a kitchen drawer is much more appropriate for a four-year-old than sorting wooden circles and triangles into two piles. Whereas teachers can justify the latter type of activity on the basis of training basic skills, as far as the blind child is concerned it has no purpose.

When working on auditory discrimination teachers should work on environmental sounds helpful to the child for safety (car tires) and orientation (ticking clock) before less necessary discriminations such as farm animal noises.

Lowenfeld (1962) identified several principles which are basic to the teaching of visually handicapped children. The two most important are:

1. Concreteness: This stresses the importance of direct contact. Naming and describing is inadequate. The blind child needs guided experiences with real objects.
2. Unified Instruction: A sighted child develops a visualized conceptual whole by scanning the total environment and focusing on parts. At the same time visual information is associated with sensory input from other modalities, and cause and effect relationships are recognized. For example, in a supermarket the sighted child relates the noises, smells and tactile kinesthetic impressions with visual information. In order for the blind child to develop organized, inter-related concepts, instruction must be especially designed so that he experiences given situations as wholes or units.

The thematic approach provides a unifying framework for the practice of skills and introduction of new language and information. Activities from various developmental areas should be interwoven in logical sequence. Teachers must be prepared to draw the attention of the blind child to certain situations which provide opportunities for a sighted child to learn incidentally and spontaneously. The visually impaired child needs more guidance in his observation and interpretation of his environment. When teaching blind children, teachers must be specific in their use of language. Language may have been learned by rote and, although it may serve social needs, cannot be used as the basis for instruction unless it has been associated with meaningful experiences.

## GENERAL STRATEGIES

The teacher should:

1. Give the child new experiences one at a time.
2. Sequence learning experiences appropriately.
3. Provide adequate opportunity for repetition of words, actions and activities until the child is confident with new learnings.
4. Describe the world of the blind child to him in meaningful terms and, as often as possible, let him explore real objects by touch, feel, and smell.
5. Use verbal description to accompany co-active movement, i.e. have the child "watch" by putting his hand on the hand of the adult who holds an object or having the adult's hand encompass his while the two together cause an object to perform a function.
6. Reinforce by verbal praise or hugs and squeezes since a blind child cannot see a smile of approval.
7. For partially sighted children, provide tactual and manipulative materials which are brightly colored and in sharp contrast to the background.
8. Remember that the strategy for teaching blind children is the same as that used in teaching sighted children: play.

## OBJECTIVES

## TEACHING STRATEGIES

Provide opportunities for the child to listen to a variety of tapes, instruments, household sounds, sound toys, voices, etc. Go on "listening walks" with the child.

Encourage the child to listen for specific noises, e.g. voices, music toys.

Provide child with opportunities to hear many kinds of poems, finger plays, songs and rhyming stories, and encourage him to learn to say some of them.

From a group of 3 words have the child pick out the 2 words which begin the same. Have a child think of words that begin the same as another word.

Tape Recorder.

Hap Palmer Records, Nursery rhymes.

Manipulates a variety of objects, toys, equipment, etc.

Demonstrates the ability to sort and match by:

- shape
- size
- substance (solid or liquid, hard or soft)
- texture
- weight
- embossed symbol
- braille letters, numbers, words.

Discriminates between a variety of objects and shapes and identifies these by name.

Discriminates between braille symbols (embossed lines, shapes, etc.) and identifies some braille letters and words, e.g. his name.

Reproduces simple patterns:

- pegboard patterns
- block patterns
- bead patterns
- poker chip patterns.

Provide the child with opportunities to explore tactually,
e.g. lotions, powder, soap bubbles, water, sand, vibrations.

Encourage child to explore all the materials and equipment in his play environment.
A.P.H. Preschool

Materials.
Sally Mangold
Program.

The child:

Develops an awareness that something exists in visual field, e.g. lights, bright objects.

Attends to visual environment.

Demonstrates the ability to sort and match objects, shapes, pictures, letters or numbers.

Discriminate between and identifies:

- people
- objects
- shapes (solid and outline)
- color, color tones
- pictures
- letters, words, numbers.

Reproduces visual patterns:

- pegboard patterns
- block designs
- parquetry designs
- toothpick patterns
- poker chip patterns
- bead patterns
- shape patterns
- stamp patterns.

Visual Efficiency Program.

PRE-ACADEMIC
Levels 1 and 2 (Preschool)
D. Integrating Visual, Auditory, Fine Motor

1. General

The child:
Matches the appropriate symbol for the given auditory sounds.

Reproduces appropriate sounds for visual symbols.

Follows directions in a pencil-paper task.

## 2. Olfactory and Gustatory

Develops an awareness of smell and taste by a variety of stimulation experiences.

Identifies and discriminates bitter, sweet, sour, etc.

Identifies the location of smells and odors in the environment.

## 3. Auditory Memory

Reproduces sounds by clapping, tapping or playing musical instruments.

Demonstrates the ability to sequence $2,3,4$ verbal commands; 2, 3, 4 musical instruments; 2, 3, 4 bead patterns from verbal directions; digits 2, 3, 4 in order.

Have the child taste a variety of foods, and smell foods and a variety of fragrances and odors of the environment.

Provide activities to locate smells of foods, flowers, paint, perfumes, smoke, etc.

PRE-ACADEMIC
Levels 1 and 2 (Preschool
D. Integrating Visual, Auditory, Fine Motor

## 4. Tactual Memory

The child:
Identifies what (or who) is missing from a group of people, objects, forms, shapes or toys.

Reconstructs a series (2, $3,4)$ of objects, forms, beads after tactual exposure.

## 5. Visual Memory

Identifies what (or who) is missing from a group of people, objects, forms, pictures, numbers, letters.

Reconstructs a series (2, 3, 4) of objects, forms, pictures, numbers, letters, after visual exposure.

## 6. Cognitive Tasks

Differentiates between same and different.

Demonstrates understanding
of spatial concepts:

- across
- up/down
- top/bottom
- above/below
- over/under
- first/last
- left/right
- side
- in, around, out of
- middle
- between
- corner
- on top of, next to
- front/back
- forward/backward.

PRE-ACADEMIC
Levels 1 and 2 (Preschool)
D. Integrating Visual, Auditory, Fine Motor

The child:
Demonstrates understanding of temporal concepts:

- now/before/after
- first/last
- fast/slow
- start/stop
- begin/finish
- day/night
- yesterday/tomorrow.

Demonstrates ability to compare size according to:

- long, short, tall
- big, little, small
- wide, narrow.

Demonstrates ability to match, using one-to-one correspondence.

Demonstrates ability to rote count 1 to 10 .

Demonstrates understanding of number properties.

Recognizes number symbols $0-10$.

Demonstrates understanding of the concept of one more, or less.

## MATHEMATICS FOR BRAILLE-USING STUDENTS

Levels 3 and 4, Grades $1-6$

## INTRODUCTION

The objectives in this curriculum guide for braille-using students generally reflect those which form the basis of the mathematics program as stated in the Program of Studies for Elementary Schools, Alberta Education. Variations occur in areas of special skill development unique to the braille-using student in the teaching strategies and materials that are suggested.
"Project Waverley" a developmental program for blind primary students, developed by the Edmonton Public School System, has been used extensively to form the basis of the following grades one through three mathematics curriculum and is gratefully acknowledged. Primary teachers are advised to refer to Project Waverley for more detailed program suggestions.

Braille-using students will generally take longer than their sighted peers to develop a thorough understanding of basic mathematics. Concepts must be taught sequentially to mastery and this process simply cannot be rushed. Although this guide uses a grade division similar to the regular program of studies it cannot be assumed that the entire mathematics program should be completed in six consecutive years. Progress will be highly individual. Even with the possible tutorial and/or resource room assistance and appropriately sequenced learning experiences some blind students may take an extra year or more to complete the entire program. If progress in the other major subjects areas is grade level equivalent some special provisions may be necessary to enable the student to complete the elementary mathematics program in the junior high school.

Many mathematics concepts are increasingly abstract in nature and are normally taught by using a variety of pictorial representations. Tactual drawings of these representations are frequently confusing and consequently not as effective as the corresponding pictorial drawings. In order to develop a thorough understanding of basic concepts braille-using students will require more "hands-on" concrete experience than their sighted peers.

As the braille student progresses he will gradually learn to read the braille standard mathematical or Nemeth Code symbols. Also, he will learn to use special equipment such as the abacus, the brailler, the Sewell Raised Line Drawing Kit, and the talking (Speech-plus) calculator, which serve as learning aids and recording devices.

To encourage and motivate the student, the teacher may wish to introduce the use of the Speech Plus calculator as early as grade one. This should be used primarily as a self-checking device until the student has mastered the mathematical skills. The calculator can be used for regular computation at the teacher's discretion.

The Optacon is not recommended for general use in mathematics because of the reading difficulty presented by vertical arrangements of numbers, however, it could be used for reading word problems.

The teacher who has a braille-using student in the class should use the curriculum guide and "The Visually Impaired Student in the Regular Classroom" section of the Special Education Handbook in conjunction with the appropriate Program of Studies and the regular mathematics curriculum guide for the particular level and grade.

The regular class teacher who has a braille-using student in the classroom is not expected to know braille or use the specialized aids and appliances. The teacher will receive assistance from a trained itinerant teacher of the visually impaired or a special education consultant from Alberta Education. These resource personnel can give advice on the appropriate type of equipment and materials required and provide suggestions regarding adaptive methods that will assist the teacher in meeting student needs. Also, the teacher will have access to equipment and materials for students supplied on a free loan basis by the Materials Resource Centre (M.R.C.), Alberta Education, Edmonton.

OBJECTIVES

Numbers
The student:

Identifies equivalent sets of concrete objects through manipulation.

Makes comparisons using the terms more than, less than, and equal to.

Associates a set of concrete objects with the numerals $0-9$ orally.

Recognizes braille symbols 0-9.

Associates a set of concrete objects with the braille symbol 0-9.

Use one-to-one correspondence: cups-glasses, spoons-bowls, shoes-socks, children-chairs.

Be sure to stay within the range of the student's experience.

Group similar objects into "sets" and call them sets, e.g. set of 3 cups, set of 6 spoons. Be sure small objects are in a controlled area spools, sticks, geometric shapes, etc.

Introduce less familiar objects to students and group them into sets up to nine elements.

Count real objects. Provide many experiences. Strive for a sense of two - 2 shoes, 2 mitts, 2 feet etc. Use counting apparatus.

Use sets of objects 0-9.
Introduce term - symbol for number sign.

Introduce terms - symbols 0-9.

Practise with variety of concrete objects, e.g. use cards containing 7 buttons and the brailled numeral 7. Cut top right corner off card so that student will know when the card is right side up.

## MATERIALS

Science Activities for the Visually Impaired, Unit 9. Familiar objects from student's environment.

Construct boards. Divided boxes. Work Trays.

Washers, pencils, crayons, marbles, jacks, rocks, food items etc.

Science Activities for the Visually Impaired, Unit 4. Numberaides.
Cuisenaire Rods.
Science Activities
for the Visually
Impaired, Unit 13.
Fingers, classroom objects, sorting trays brailler, braille paper and eraser, cards with tactile objects attached, e.g. sandpap felt.
Use 10 clothes hangers with different numbers of clothes pins attach

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

## Numbers continued

The student:

Orders the braille symbols from 0-9, and supplies missing numerals before, after or in between given numerals.

Expresses orally and brailles numbers as sets of tens and ones.

Regroups a number of concrete objects as sets of tens and ones.

Reads, brailles and orders numerals from 0-99.

## Operations and Properties

Demonstrates understanding of the process of addition and subtraction.

Reads and brailles symbols for numbers 0-9.

Use container (box, bag, envelope) with number (braille) on outside and inside objects match to outside number (buttons, blocks, crayons).

Use popsicle sticks, e.g. 1 bundle of ten plus $1=11 ; 1$ bundle of ten plus $2=12$.

Use same strategies as for 0-9.

Join sets of objects, begin with sums up to 5 ; follow with sums up to 9 .

Separate a set of objects
with minuends up to 9 .
Order braille number cardson clothespin line or rack.

Braille worksheets involving missing numerals.
Number Sticks.

Counting objects up to 100 popsicle sticks. Group in bundles of 10 . Tongue depressors elastic bands.

Concrete objects, sorting trays. Stringing beads. Take Away Game.

Braille number cards. Braille playing cards (delete face cards).

Operations and Properties continued

The student:

Reads, brailles and solves addition and subtraction equations involving sums and minuends up to 9 .

## Measurement

Tells time to the hour only, using a clock with braille numbers.

Recites the days of the week in order.

Compares masses of two concrete objects using terms such as heavier than, less than, higher than, lower than, etc.

Have student construct own braille cards and match sets of objects with braille number. Use oral drill and raised line worksheets for operation problems. (Students must give appropriate operation sign.)

Have student braille and solve story problems. Provide braille worksheets.

Note: It is difficult for a young blind student to arrange figures in vertical columns on the brailler, however, he should be encouraged to read both the horizontal and vertical formats in his texts.

Work first on $12,3,6$ and 9 as positions for food on plate.

Keep a class calendar.

Introduce the student to concrete objects for varying weight beginning with quite dissimilar objects, gradually.

Proceed to balance scale Science.

Concrete objects.
Nemeth Code of
Braille Mathematics
and Scientific
Notation, 1972.

Concrete objects, stringing beads. Primary Abacus.

Clock.
Learning to Tell Time is Fun (record).

Science Activities for the Visually Impaired, Unit 26. Classroom objects. Balance Scale, fruits, vegetables.
Science Activities
for the Visually
Impaired, Unit 6.

## Measurement continued

## The student:

Compares the capacities of two containers by using a non-standard unit of measure, using the braille symbols "more than" and "less than" when recording results.

Demonstrates an awareness of the differing sizes and values of coins.

## Geometry

Classifies by manipulation; 3-D objects according to various attributes.

Incorporate with daily living skills - how to measure liquids and dry foods. Do some estimating by exploring size of various containers, then measuring 2 containers with a third one, recording the results. Record approximations and final results on student record sheet.

Have students sort money according to size and edge. Introduce singular value of each coin.

Provide "hands-on" experiences using 3-D geometric shapes. Initially have students explore shapes, then build with them.

Discuss and have students examine tactfully 3-D objects and models.

Have the student classify, by manipulation, a wide variety of shapes according to the various attributes,
e.g. round shapes: ball, button.

Introduce circle, square, tirangle with Touch and Tell Books and teacher-made materials.

Water table or buckets, styrofoam cups, plastic cups and jars, jugs. Cans - baby food etc. sand, dustbane, rice, dried beans, etc. Raised graph paper or other methods of charting results. Plastic fit together blocks (good for graphing results).

Real money.
Play store.

Solid geometric shapes. Science Activities for the Visually Impaired, Unit 12.

3-D Models.

Touch and Te 11 Books.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| Geometry continued |  |  |
| The student: |  |  |

## INTRODUCTION

The braille-using student should be assesses upon beginning each new year of a mathematics program to determine concept and skill development levels. Instruction should begin at this level. Frequently students may still require further instruction in the previous years' program before proceeding. Progress will generally be slower than that which is made by sighted peers.

The braille-using student in an integrated setting for mathematics will require the assistance of an itinerant teacher for the visually impaired to assist him in learning to use the necessary braille mathematical symbols and the appropriate mathematical aids.

The abacus, a mathematical aid used in computation, may be used during the grade 2 year if the student has progressed sufficiently to be able to use it. The abacus can be used to reinforce concept of place values (ones, tens, and hundreds).

References: The Abacus Made Easy, author Moe Davidow; A Simplified Manual for Teaching Cranmer Abacus. Workjobs. Teaching Aids.

## Numbers

The student:

Identifies the cardinal number associated with a set of objects.

Orders numerals and recognizes "betweenness" $0-100$.

Reads and writes numerals 0-999.

Establish ordering, continue in this manner for 100-200.

Establish order 1-200.

Use rote counting, practice reading and brailling numbers. Continue to 999.

Investigating School Mathematics: el - e6, ell, el3, e15-el8, g5 - g6, gll, gl3 top.

Concrete objects.

Abacus.
Hundred pegboard and cylinders.

Numbers continued
The student:
Sets numerals from 0-999 and demonstrates understanding of place value using abacus.

Identifies multiples by counting by $5^{\prime} \mathrm{s}, 10$ 's and 100 's.

Introduce terms greater, greater than, greatest, lesser, less than, least.

Use oral drill - what comes after 87, before 16 .

Introduce inequality symbols: greater than, less than.

Use clothesline with clothespins with braille numbers attached.

Use braille number cards, e.g. have student take 2 cards and put in correct sign.

Practise counting by 10 's to 100, use concrete objects in bundles of 10 .

Use oral drill, rote counting.

Use dimes.
Have student braille numbers.
Practise counting by 5's to 100, use concrete objects in bundles of 5 .

Use oral drill, rote counting. Use nickels.

Investigating School Mathematics: Unit f, page 36.
Concrete objects sticks, pipe cleaners, tongue depressors etc.

Nickels, dimes.

## Numbers continued

## The student:

Identifies and represents fractions (halves and quarters) using concrete materials.

## Operations and Properties

Demonstrates mastery of basic facts involving sums and minuends to 18 .

Symbolizes addition and subtraction situations in both linear and spatial form.

Introduce student to terms: half, halves, quarters, fourths, one fourth, one half, two fourths, three fourths, part and whole through manipulation of concrete objects; begin with halves, quarters.

Use styrofoam, sponge, cardboard shapes of parts of a whole,
e.g.

cardboard

Use food, e.g.
$\frac{1}{2}$ orange
$\frac{1}{4}$ apple etc.

Review solving addition equations for sums of 10 or less, using counters.

Introduce vertical format for the braille-using student.

Note: 1. Vertical format is time consuming and difficult on the brailler. However, the student should use this method until proficiency in addition on the abacus is attained.

Investigating School
Mathematics: h21 - h29.

Investigating School Mathematics: e41-e53, e57-e60, 361 bottom, e62, e64 top, f9, f11-f35.
OBJECTIVES

The student:

Does simple addition and subtraction without using "secrets"*.

Demonstrates understanding of the basis of the commuative property for addition.

## TEACHING STRATEGIES

2. The brailler will be used as a recording device for answers to abacus problems.

Note: *"Secrets" in the use of the abacus refers to sets of rules meant to be memorized by the student to help him in adding and subtracting.

Have student complete braille worksheets.

Review solving subtraction equations related to sums of ten using counters.

Have student solve story problems involving addition and subtraction facts to ten.

Have student solve addition equations for sums 11-18 using counters.

Have student solve subtraction equations related to sums 11-18 using counters.

Use cassette tapes of addition, subtraction questions (sound indexed); have student braille answer.

Have student solve story problems involving 2-digit addition and subtraction.

Review place value.

## MATERIALS

Abacus Made Easy.

Counters, stringing beads, sorting trays.

Clothespins on a clothesline.

Plastic snap together blocks, other manipulative material.

Braille flash cards. Language master and cards.
Number fact records.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| Operations and Properties continued |  |  |
| The student: |  |  |
|  | Stress beginning work in one's place, ten's place, hundred's place. |  |
|  | Solve story problems using 3-digit addition and subtraction questions. |  |
| Demonstrates understanding of multiplication and division. | Introduce terms; equivalent sets, multiplication, times, pair, products, multiplication symbol. | Investigating School Mathematics: g49 - g57, g58 - g61, g64. |
|  | Introduce using equivalent sets to show the products of two numbers, e.g. 3 sets of two are 6 . | Cups, saucers. Counters. |
|  | Use number line (braille numbers) to show jumps to find products, e.g. 3 jumps of two are 6 . | Number Line - braille. |
|  | Relate the concept of sets of equivalent sets to repeated addition to find products, e.g. $2+2+2=6$ then $3 \times 2=6,3$ two's are 6 , we braille $3 \times 2=6$, we say three times two are six. |  |
|  | Have student braille multiplication equations and solve equations and stories when multiplying by 2, 3, 4, 5 to 25. |  |
| Demonstrates mastery of basic facts involving sums and minuends to 18 . | Have student solve story problems involving addition and subtraction facts to 18 . | Braille worksheets. |

Operations and Properties continued

The student:

Adds and subtracts 2 and 3 digit numbers with no regrouping.

## Measurement

Reads the dates on a braille calendar.

TEACHING STRATEGIES MATERIALS

Review basic facts of addition and subtraction to 18.

Provide readiness activities for 2-digit addition and subtraction.

Review place value.

Begin with groups of tens and ones, e.g. $20+30=50$.

Use concrete objects to find the sums.

Introduce subtraction as:

$$
\begin{array}{rrrr}
7 & & & 70 \\
\frac{-2}{5} & & \frac{-20}{50} & \\
\hline & - & & 48 \\
48 & 40 & 8 & -23 \\
\hline-23 & -20 & -3 & -2
\end{array}
$$

Review days of the week. Make monthly calendar for each student.

Investigating School Mathematics: f63 bottom, g35, g38, g39 top, g40 top, g41-g47 g64 top, h1 - h9, gl1 top, h12 top, h13 - h20 top.

Investigating School Mathematics: f47-f61 f64, g15-g22.

Concrete objects bundle of sticks, etc. Dimes and pennies.

Braille Calendar class and student copies.
OBJECTIVES

The student:

Recites months of the year in order.

Tells time to the hour, half-hour, and quarter-hour.

TEACHING STRATEGIES

Make large monthly calendar for the class.

Incorporate into morning exercises, e.g. "Today is Tuesday, Sept: 5, 1981. Find it on the class calendars. What will tomorrow be?" etc.

Have student put month flash cards in order.

Use the following:
Echo - calling; call out months of year, have student echo them;

Rhythm clapping; clap the rhythm for each month of the year or use percussion instruments.

Introduce clock by associating familiar activities, e.g. breakfast, school begins, recess, with the appropriate time.

Discuss need to tell time, e.g. punctuality.

Give student a clock face, discuss size and function of hour and minute hand.

Review telling time to the hour.

MATERIALS

Braille flash cards of names of months.

Percussion instruments.

Investigating School
Mathematics: page 33-39.

Clock face.

Real clock with glass off; braille numbers glued on.

Paper plates, bristol board, paper fasteners.

## OBJECTIVES

TEACHING STRATEGIES

Measurement continued

The student:

Writes hour, half-hour, and quarter-hour in braille notation.

Counts collections of coins up to 25 c.

Gives equivalent value of coins up to 25 c.

Makes purchases up to 25 ç.

## Geometry

Classifies 2-D figures in relation to boundaries, corners and faces.

Make clock, using paper plates bristol board, hands and paper fasteners. Attach braille numbers.

Introduce telling time to thirty minute, then fifteen minute intervals

Have student braille time in braille notation.

Review identification of money; penny, five cents, ten cents, twenty-five cents, according to size and edge by manipulation of actual coins.

Give student handful of mixed coins, have him classify coins into groups, order 1 c to 25 ç.

Review characteristics of triangle, square, rectangle, circle.

Have student manipulate $2-D$ objects.

Have student identify and locate faces, corners.

Time to Tell Time.
Learning to Tell
Time is Fun.

Show and Tell (records).

Investigating School Mathematics: Unit 3, p. 25-27 and p. 31. Real money.

Play store.

Investigating School Mathematics: g23-g25 g33.

Box of odds and ends; books, erasers, tops, boxes, marbles, blocks, balls, party hats, soap bars, funnels, ball bearings, rods etc

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| Geometry continued |  |  |
|  | Have student name the shape, e.g. circle; locate object that is the same shape as one given; locate object that is the same size as the one given. | My Book of Cubuoids and Rectangles; My Book of Cubes and Spheres; My Book of Spheres, Cylinders, and Circles; My Book of Cones, Pyramids and Rectangles; Find the Same (Booklets). |
|  | Introduce raised line drawings for 2-D figures. | Sewell Raised Line Drawing Kit. |
| Classifies $3-\mathrm{D}$ figures in relation to corners, edges and faces. | Through manipulative activities, have the student find: edge, corner, points (vertices) and faces on 3-D shapes. | Solid geometric shapes Science ... A Process Approach, Unit 12. Polaido blocks. |
|  | Introduce terms and demonstrate on objects. | Objects from home in a variety of sizes and materials such as glass, wax, rubber, wood, plastic. |
| Develops geometrical patterms using 2-D figures. | Have student explore triangles, squares, and rectangles. Use manipulative materials. <br> Make mobiles by tying figures to a coat hanger with a string. | Popsicle sticks, straws, pipe cleaners, toothpicks, pick-up sticks, geoboards and elastics, glue and plasticine, wire, varying size sponge shapes, yarn, paper plates, coat hangers. |
| Matches halves through paper folding to demonstrate plane symmetry. |  | The Master Cube. Mitchell Wire Forms with Matched Planes and Volumes. Geoboard. Investigating School Mathematics: h30. |

## Geometry continued

The student:

Identifies open and closed curves.

## Graphing

Locates objects on a grid.

Uses simple line and bar graphs.

Uses simple line and bar graphs to interpret data from related subject areas.

Review term "open". Begin with curved line figures use yarn, twine etc. to form curved line figures. Place a plastic toy animal, insect inside - explain open as the toy being able to come out, closed as toy being locked in.

Use basic geometric shape outlines to reinforce this concept,
e.g.


Relate to Mangold progress graphs and Dorothy Quentin Joseph program.

Have students measure and record height, weights.

Introduce graph construction using special graph paper (raised line/large print) and graph board.

Yarn, twine, string, pipe cleaners, straws, wire.
Small toys, animals, insects.

Graphing continued
The student:

Note: In gathering data from the environment it may be beneficial for the visually impaired student to be paired with a sighted peer. However, with special graph paper the visually impaired student should be able to construct most graphs. Braille-labels can be used with braille graph paper. Map pins can be used.

Braille graph paper. Braille-label.

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

## INTRODUCTION

The braille-using student should be assessed upon beginning each new year of a mathematics program to determine concept and skill development levels. Introduction should begin at this level. Frequently students may still require further instruction in the previous years' program before proceeding. Progress will generally be slower than that which is made by sighted peers.

The braille-using student in an integrated setting for mathematics will require the assistance of an itinerant teacher for the visually impaired to assist him in learning to use the necessary braille mathematical symbols and the appropriate mathematical aids.

The Program of Studies for Elementary Schools, Alberta Education, 1978 is the basis of the grade four mathematics program. The following should be considered an addendum when teaching a braille-using student and elaborates only on these objectives which require modification in scope, teaching strategies and/or materials.

At the beginning of each braille mathematics textbook there is a list of all the new braille symbols which will be introduced with a brief explanation of their meaning. Students and teachers should refer to this section when encountering a new or unfamiliar braille notation.

## Numbers

The student:
Orders and determines "betweenness" of whole numbers ( $0-1000$ ).

Demonstrates understanding of and uses symbols > , 〈 and $=$ to show relationships.

Provide practise in comparing different numbers to determine largest, smallest, etc. Pay particular attention to left-to-right sequencing and place value.

Activity: set several abacus with different numbers - students must place in appropriate order according to the set numbers.

Use concrete objects initial1y. Have student place appropriate sign between sets.

Braille worksheets.

Braille worksheets.

of 1,000 's, 100 's, $10^{\prime} \mathrm{s}, 1$ 's, and tenths.

Reads and writes numerals 0-9, 999.

Review counting by 5's, $10^{\prime} \mathrm{s}$, 100's. Counting by 2's - use concrete objects in bundles of 2's. Use oral drill and rote counting. Use pairs of things, e.g. shoes, mittens, hands, ears.

Counting by $25^{\prime} \mathrm{s}$. Use concrete objects in bundles of 25 , oral drill and rote counting
pay special attention to place value.

Provide activities and games, e.g. braille a number which has four digits and a 7 in the hundreds place, etc.

Use rote counting. Provide practise reading and brail1ing numbers.
Extend concepts of between, greater than, less than. Use braille number cards have student place correct sign between numbers, e.g. 1963, 1693.

Use clothesline with braille numbers attached to clothespins for ordering.

Play number games - example Pick a number between 0 and 10,000 . Players must ask as few questions as possible in order to determine number. Questions may only be responded to by yes or no.

Concrete objects popsicle sticks, toothpicks, cards, pipe cleaners, pairs of mittens, shoes etc.

Abacus Made Easy.

Arithmetic Teacher, Idea Section.

Abacus.
Braille worksheets.

Arithmetic Teacher: Ideas Sections.

Numbers continued
The student:

Rewrites numbers in expanded notation ( $0-1,000$ ) and vice versa.

Identifies, writes and compares fractions from physical representations (halves, quarters, tenths, and fifths).

Reads and writes decimals to tenths.

Operations and Properties
Identifies additive, subtractive, multiplicative and divisive situations.

Introduce in the same sequence as for sighted students.

Note: Reading and brailling expanded number notation is very lengthy and time consuming.

Initially introduce fractions by using familiar items ( $\frac{1}{2}$ orange, $\frac{1}{4}$ pizza, etc.) and teaching appropriate Nemeth Code notation. Teach braille symbols for basic geometry forms, e.g. notations for lines, rays, segments, angles, etc. Proceed to raised line representations.

Introduce only after student is familiar with tenth as a fraction. Divide measuring device (e.g. popsicle stick, which is used in counting bundles) into tenths.

Teach in the same sequence as for sighted students.

Nemeth Code.
A.P.H. Fraction Form.

Nemeth Code.

| OBJECTIVES | TEACHING STRATEGIES |
| :--- | :--- |
| Operations and Properties <br> continued | The student: <br> Adds and subtracts two <br> or three-digit numbers <br> requiring regrouping. <br> without regrouping. Do not <br> attempt to teach concept of <br> regrouping on abacus since <br> the abacus depends upon rules <br> and not concept understand- <br> ing at this level. <br> Begin with concrete materials <br> and sorting trays. |

Have student braille answer. Refer to Nemeth Code for appropriate braille formats when regrouping on brailler.

## Abacus

The student:
Sets numbers from 0-999 and demonstrates knowledge of place values.

Adds and subtracts 4-digit numbers using "secrets"*.

Note: *"Secrets" in the use of the abacus is a set of rules by the student to help him to calculate.

MATERIALS
A.P.H. sorting trays.

Nemeth Code.

The Abacus Made Easy.

## Measurement

The student:
Counts collections of coins up to $\$ 1.00$.

Gives equivalent value of coins to $\$ 1.00$.

Makes purchases up to \$1. 00 .

Estimates and uses standard metric units of length, capacity and mass.

Identifies proper measuring instruments for a given task.

Through manipulation of coins, have student show equivalents of five cents, ten cents, twenty-five cents.

Give student mixed coins: have him find the value.

Practise counting nickels by fives, dimes by tens etc.

Have student buy more than one item at the store and figure out what coins to use.

Use brailled and oral stories, e.g. Tom had $6 ¢$, then ran an errand and earned 8 c. How much does he have now?

Have student buy more than one item at the store and figure out the change he should receive.

Review size concept terms: long, short, small, big, tall, thin, wide, etc.

Science .. A Process Approach, Units 26 and 24 , Units 23 and 34.

Investigating School Mathematics: F37, F42, F45.

TEACHING STRATEGIES

Provide boxes containing objects; have student line up objects from longest to shortest, etc.

Introduce measurement of raised line representations by using twine, wool, plasticine, wire, pipe cleaners to outline objects on a printed page for the student to measure.

Use body, hand foot construction paper cut-outs; have student compare and order according to size.

Use cardboard or wooden strips of the same width, varying lengths; have student line them up along the edge of the table from shortest to longest, etc.

Have student measure object with rulers.

Introduce concrete objects of varying mass; begin with dissimilar to similar mass, use non-standard units, e.g. heavy-light.

Have student determine if one is heavier than or lighter than another.

## MATERIALS

Braille centimetre graph paper.

Braille Centimetre and metre rulers.

Centimetre squares made of heavy cardboard

Geo blocks, parquetry pieces, pattern blocks, Classroom objects, objects from home: balance scale, plasticine, sand, etc. in containers, e.g. plastic bags, milk cartons, beans, sawdust, stones, buttons, spools, washers, marbles, etc.

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

## Measurement continued

The student:

Have student take off one shoe and find 3 objects which are lighter, 3 objects that are heavier.

Introduce balance scale; heavy and light object, have student estimate. Use balance scale to check.

Have the student order large containers of various sizes and shapes in a row, from the one he estimates to hold the most to the one he estimates to hold the least.

Have student record, estimate and order, use litre to fill each container in turn, recording results. Check to see if ordering is correct.

Provide "hands-on" experiences using 2-D shapes. Review circle, square, triangle, rectangle, their characteristics and raised line configurations.

Litre containers, pail, tea kettle, cups, jars, glasses, cans, pop bottles, plastic containers of all sizes and shapes.
Sand, marbles, sugar cubes, wheat, rice, peas, sawdust, stones, etc.

Sand table, water table Litre Set 4 (4 uncalibrates 1 litre cups containers in different shapes).

Analysis of a litre (17 related plastic bottles 100 Millilitres

Science Activities for the Visually Impaired, Unit 2. Science Activities for the Visually Impaired, Unit 10.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| Geometry continued |  |  |
| The student: |  |  |

Demonstrates ability to construct triangles, circles, rectangles and squares.

Identifies focus of $3-D$ objects as $2-D$ shapes.

## Graphing

Constructs simple line and bar graphs for recording data.

Identifies axes.

Locates position of object on a grid.

Plots points on a grid when given two coordinates.

Have student trace around shapes, learn name and characteristics.

Have student collect and bring shapes from home, construct $2-D$ shapes in wire, wool, pipe cleaners, etc.

Have student find $2-D$ shapes on 3-D objects, find shapes in classroom, school, etc.

Introduce terms: sphere, cube, rectangular prism, cone and cylinder when appropriate.

Touch and Tell form boards.
Many examples of each shape in different sizes.
Foil paper to trace around shapes.

Plasticine, wool, wire, styrofoam, pipe cleaners for constructing 2-D

Include terms horizontal and vertical.
shapes.

Braille graph paper.

Graphic Aid for Mathematics.

## MATERIALS

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

## INTRODUCTION̉

The braille-using student should be assessed upon beginning each new year of a mathematics program to determine concept and skill development levels. Instruction should begin at this level. Frequently students may still require further instruction in the previous years' program before proceeding. Progress will generally be slower than that which is made by sighted peers.

The braille-using student in an integrated setting for mathematics will require the assistance of an itinerant teacher for the visually impaired to assist him in learning to use the necessary braille mathematical symbols and the appropriate mathematical aids.

The Program of Studies for Elementary Schools, Alberta Education, 1978, is the basis of the grade four mathematics program. The following should be considered an addendum when teaching a braille-using student and elaborates only on these objectives which require modification in scope, teaching strategies and/or materials.

At the beginning of each braille mathematics textbook there is a list of all the new braille symbols which will be introduced with a brief explanation of their meaning. Students and teachers should refer to this section when encountering new or unfamiliar braille notation.

## Numbers

The student:

Identifies and uses place value of digits $(01-99,999)$.

Provide counting practise.

Provide practise in comparing different numbers to determine largest, smallest, etc., and ordering a group of numbers.

Provide practise in determining appropriate mark to use for decimal on abacus.

Bundled toothpicks, popsicle sticks, etc. Counting frames with markers for decimals. Abacus.

Braille worksheets. Workbook exercises.

Abacus Made Easy. Detailed Instruction of the Crammer Abacus

## OBJECTIVES

## Numbers continued

The student:

Regroups 5-digit whole numbers and rewrites in expanded notation.

Identifies, reads and writes a fraction to represent a point on a number line portion of a region with emphasis on halves, quarters, fifths, and tenths.

Reads and brailles fractional notation e.g. $1 / 2$ and $\frac{1}{2}$.

TEACHING STRATEGIES

Drill Activity: Braille several groups of three numbers. Have student select largest (or smallest or middle) number in each group and add all of these answer numbers on Speechplus calculator. Provide total in braille so student can self check.

Note: Brailling expanded notation in time consuming and lengthy. Provide only enough drill to assure student understands concept.

Use models of fractions. Incorporate a discovery approach.
Have students divide whole objects into $1 / 4$ 's, $1 / 5^{\prime} \mathrm{s}$ etc. Ask questions; "Are the parts equal in size? Volume?; etc.

Note: Initially assure that the scale of a number line is sufficiently large to make accurate tactual distinctions between functions. For example, a metric number line could be made to go around the entire perimeter of the classroom. Gradually introduce smaller sized number lines.

MATERIALS

Ideas and Activities for Using Calculators in the Classroom.

Speech-plus Calculator.

Imperial dry measuring cups.

Paper plates divided into parts.
A.P.H. Fraction Kit.

Nemeth Code Guide.

Numbers continued

The student:

Interprets simple ratio situations.

Reads and brailles decimals to hundredths.

Regroups tenths and hundredths.

Expresses and generates proportional ratios.

Relate to everyday usage, for example in making paste: 1 part liquid to 2 parts flour.

Have students solve simple recipe problems - double or triple or half recipe.

Review decimal notation to tenths. Provide braille practice sheets. Ensure students pay particular attention to place value and decimal notation.

Introduce notation for dollar and cents. Relate hundredths to properties associated with cents.

Introduce by using concrete materials, e.g. cut a square meter of paper into tenths then hundredths. Expand to money notation.

Use many examples of familiar and meaningful materials to introduce concept, e.g. paper plates of same size which are divided into thirds, sixths, ninths, etc.

Have student divide linear measures of the same size into halves, quarters, eighths, etc then place fractional pieces on top of each other to discover equivalent sets ( $\frac{1}{2}$ pie is the same as $2 / 4$ or $3 / 6$ pie).

Use a balance scale with fractional weights to generate equivalent fractions.

Nemeth Code Guide.

Measuring cups and spoons.

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

## Operations and Properties

The student:
Adds and subtracts numbers using standard or expanded notation.

Writes related sentences for addition, subtraction, multiplication and division.

Multiplies whole numbers by one and two-digit whole numbers.

Divides one and two-digit whole numbers by a one digit divisor.

Mentally multiplies whole numbers by $10,100,1,000$.

Ensure student pays attention to place value when brailling numbers in columns.

Have student use speech plus calculator as a self checking device.

Use addition and subtraction pyramid games and other activities to add variety to lessons.

Use oral drill.
Use tape recorder to tape sentences.

Begin by using concrete examples, e.g. $18 \times 7$ is seven bundles of eighteen toothpicks, etc. Then proceed to teaching appropriate procedure and format in braille. Teach the abacus rules for multiplication once the basic process is understood. Use Speech plus calculators as a checking device.

Proceed from concrete activity to brailler, to abacus as for multiplication.

Use oral drill. Play the sound game, "tap" means one "clap" means ten etc. "snap" means times: tap, tap, tap, tap, snap, clap $4 \times 10$ or 40.

Speech plus calculator.

Arithmetic Teacher Idea section.

Braille worksheets.

Nemeth Code Guide. Abacus Made Easy.

Operations and Properties continued

The student:
Adds and subtracts decimals to hundredths.

## Measurement

Extends metric measurement to include the use of the standard units (mm, ml and g).

Reads and brailles time to nearest minute.

Ensure student places decimals in appropriate linear columns on brailler. Use abacus in computation.

Note: Fine precision measuring is impossible for the braille-using student. However, the student should be aware of how small these units really are, e.g. 1 mm . is approximately the width of the narrow end of a toothpick; 1 gram is approximately the weight of $\qquad$ , etc.

Encourage students to become increasingly precise in measuring with standard units. For example, linear measurement should be to the nearest cm. when using braille metric rulers.

Use large braille clockface and clockface worksheets.

Use metronome to illustrate how long a minute really is.

## MATERIALS

Nemeth Code Guide. Abacus Made Easy.

Braille metric rulers. Standard Metric Units for volume and weight.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :---: | :---: |

Expresses equivalent measures within units of capacity mass, length and time.

Reads and brailles symbols for measurement.

Finds actual perimeters of regular polygons without using formulae.

Finds area of rectangles without using formulae.

Note: Braille watches are small and it is difficult to tactually determine the precise position of the minute hand. Allow for a degree of estimation.

Digital braille watches are available.

Use many "hands-on" activities for measuring. Use level measuring devices for capacity. (In level measuring cups the exact measurement is reached once the container is full.)

Have student investigate temperatures in his environment by using a variety of braille thermometers.

Begin by measuring perimeters of familiar spaces and objects e.g. perimeter of room, teacher desk, student desk.

Proceed to large raised line drawings of various polygons.

Initially use manipulative objects which fit exactly into a rectangular form, e.g. blocks into a rectangular box. Proceed to raised line drawings.

Science Measurement Kit. Braille ruler or metric stick.

Braille thermometers

- body temperature
- indoor/outdoor
- cooking.

Braille meter stick.
Braille worksheets.

Blocks and boxes.
Raised line worksheets.

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

## Measurement continued

The student:
Uses coins and bills for purchasing and making change.

Expresses linear measurement to nearest 100 th.

## Geometry

Recognizes congruency of polygons.

Identifies axis of symmetry in symmetric objects and figures.

Use real money where possible to reinforce recognition by touch.

Have student "buy/sell" school supplies. Whenever possible, have student make purchases in the community.

Play "Monopoly" with braille Monopoly board.

Provide a sighted partner to assist with the measuring because braille rulers do not have such fine measures. Have braille student record, using the proper symbols.

Present polygons in assorted materials such as sponge, styrofoam, cardboard, etc. to the student so he can match tactually.

To demonstrate axis of symmetry make models using 3-D styrofoam shapes with long wooden picks stuck through to create axis.

Slice the models in half to give the "internal view".

Cut the models in various positions to show flips and rotations.

Monopoly Board.
-

Teacher made polygons. Commercially prepared polygons.

Styrofoam shapes. Wooden skewers.

## Graphing

The student:
Recognizes and reads bar line, circle and pictographs.

Constructs line, bar and pictographs.

Writes coordinates as ordeved pairs.

Generates ordered pairs from a given relationship.

Reads and brailles symbols.

Make graphs with tactual lines, e.g. ribbons, mactac, string.

Picture graphs are not meaningful to the blind student, therefore, use simple geometric shapes.

Have student demonstrate graph construction using a graph board or raised line graph paper, push pins and elastics. Use shapes cut from felt for pictographs.

Demonstrate process of ordered pairs on graph board.

Raised line graph paper. Household items such as string and glue for the graphs.

Graph Board.

## MATERIALS

## INTRODUCTION

The braille-using student should be assessed upon beginning each new year of a mathematics program to determine concept and skill development levels. Instruction should begin at this level. Frequently students may still require further instruction in the previous years' program before proceeding. Progress will generally be slower than that which is made by sighted peers.

The braille-using student in an integrated setting for mathematics will require the assistance of an itinerant teacher for the visually impaired to assist him in learning to use the necessary braille mathematical symbols and the appropriate mathematical aids.

The Program of Studies for Elementary Schools, Alberta Education, 1978 is the basis of the grade five mathematics program. The following should be considered an addendum when teaching a braille-using student and elaborates only on these objectives which require modification in scope, teaching strategies and/or materials.

At the beginning of each braille mathematics textbook there is a list of all the new braille symbols which will be introduced with a brief explanation of their meaning. Students and teachers should refer to this section when encountering a new or unfamiliar braille notation.

Numbers

The student:

Expresses tenths, hundredths and thousandths as fractions or decimals.

To illustrate thousandths use a piece of paper one meter long. Cut into tenths (decimeters) hundredths (centimeters) thousandths (millimeters). Use the same process for capacity measurements, e.g. litre. Provide practise in brailling fractions and decimals to the thousandths. Provide practise in setting decimals on abacus and pay particular attention that the appropriate mark is used.

Abacus Made Easy.

OBJECTIVES

## Numbers continued

The student:
Identifies and uses place value of digits (001 999, 999).

Expresses and generates proportional ratios.

Provide counting practise.

Provide practise in comparing different numbers to determine largest, smallest, etc. and ordering a group of numbers.

Provide practise in determining appropriate mark to use for decimal on abacus.

Drill Activity: Braille several groups of three numbers. Have student select largest (or smallest or middle) number in each group and add these on talk-out calculator. Provide answer in braille so student can self check.

Use many examples of familiar and meaningful materials to introduce concept, e.g. pie plates of same size which are divided into thirds, sixths, ninths.

Have student divide linear measures of the same size into halves, quarters, eights, then place fractional pieces on top of each other to discover equivalent sets, e.g. $\frac{1}{2}=2 / 4=3 / 6$. Use a balance scale with fractional weights to generate equivalent fractions.

## MATERIALS

Bundled toothpicks, popsicle sticks, etc. Counting frames with markers for decimals. Abacus.

Braille worksheets. Workbook exercises.

Abacus Made Easy. Detailed Instruction of the Crammer Abacus.

Measuring cups and spoons. Balance scale with weights.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

## Operations and Properties

The student:
Adds and subtracts whole numbers.

Multiplies whole numbers using one, two and three digit multiples, and divides whole numbers using one and two-digit divisors.

Adds, subtracts and multiplies decimals to thousandths.

Finds area of regular polygons without using formulae.

Use vertical formats on brailler.

Ensure students know all the rules for addition and subtraction on the abacus. Use Speech Plus Calculator as a checking device.

Pay special attention to ensuring columns are appropriately lined up when multiplying and dividing on the brailler. Ensure students understand format and the process of multiplication and division operations on the brailler. Use abacus as the primary aid in doing these calculations.

Use brailler and abacus with emphasis placed on increasing skill with abacus. Pay particular attention to place value and the placement of the decimal point.

When introducing a new polygon provide the student with a model in order that he can explore it's shape.

Note: A raised line drawing of a three dimensional object is very confusing.

## Abacus Made Easy. Speech Plus Calculator.

Nemeth Code Guide. Abacus Made Easy.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| Operations and Properties |  |  |
| The student: | Initially have student tape <br> or paste standard area units <br> of measurement over entire <br> surface and count units. <br> Investigate further by <br> measuring sides with braille <br> ruler. Make hypothesis, etc. <br> Also students may form figures <br> by using pushpins and elastics <br> on graph board, or, on cork <br> board covered with raised <br> line graph paper. | Graph board. <br> Cork board. |
| Finds volume of rectangular <br> solids without using <br> formulae. | Use lego and other block <br> construction for non-standard <br> volume measurement. Use <br> hollow plastic 3-D shapes and <br> have student experiment by | Lego - blocks. |
| Sevel measuring units. |  |  |

Demonstrates understanding of the system of metric prefixes.

Finds perimeter of polygons without using formulae.

Initially have student tape or paste standard area units of measurement over entire surface and count units. Investigate further by measuring sides with braille ruler. Make hypothesis, etc.

Also students may form figures by using pushpins and elastics on graph board, or, on cork board covered with raised line graph paper.

Use lego and other block construction for non-standard volume measurement. Use have student experiment by filling with standard units of capacity. Construct large raised line drawings illustrating above experiments.

Use drill and reinforcement through the use of braille practise sheets. Have students fill in blank questions.

Provide experiences with manipulative materials initially. Expand to large and clear raised line drawings which state the length of each side. If student is expected to measure sides expect accuracy to approximately the nearest cm.

Graph board.
Cork board.

Lego - blocks.
Level measuring units.
3-D plastic shapes.
Science Measurement Kit.

TEACHING STRATEGIES
MATERIALS

Distinguishes 2-D figures as similar or congruent.

Identifies radius, diameter and circumference.

Begin with styrofoam models to illustrate the concepts,

Styrofoam models.
Braille tape measure.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

## Numbers

The student:
Uses decimal fractions to express and solve for percent.

## Measurement

Reads distances according to a scale.

Draws diagrams according to a scale.

## Gecmetry

Constructs 3-D objects.

## Graphing

Locates points in all four quadrants.

Interprets and solves problems using data collected from line, bar and pictographs.

Have student solve for percent using abacus and self-check on speech plus calculator.

Begin with simple diagram, e.g. classroom, and then introduce maps, either braille or regular maps with string glued around outlines.

Construct simple diagrams by using a graph board or a cork board with graph paper, pushpins and elastics.

Note: $3-\mathrm{D}$ construction is difficult for the blind student, but some students will be able to use Mechano or Lego sets.

Use thin sheets of styrofoam assembled with pushpins.

Use lots of teacher made graphs initially to develop student's skills in searching for points. Proceed with braille worksheets of ordered pairs. Have students place pins on appropriate point on graphic aid. Use simple city maps to reinforce concept of quadrants. Ensure graphs can be easily and accurately in-
terupted tactually.

Braille Atlases.
Abacus Made Easy.

Graph board.

Building sets, e.g. Mechano or Lego. Styrofoam sheets.

Graphing continued
The student:
Reads and brailles coordinates from a graph and graphs ordered pairs from given relationships.

Use a graph board or graph paper. Be sure axis can easily be discriminated from other lines tactually. Encourage the development of a systematic approach when finding a point, e.g. always first find point of origin. Then follow $X$ asix to first coordinate then follow $Y$ axis to second coordinate, etc.

## INTRODUCTION

The braille-using student should be assessed upon beginning each new year of a mathematics program to determine concept and skill development levels. Instruction should begin at this level. Frequently students may still require further instruction in the previous years' program before proceeding. Progress will generally be slower than that which is made by sighted peers.

The braille-using student in an integrated setting for mathematics will require the assistance of an itinerant teacher for the visually impaired to assist him in learning to use the necessary braille mathematical symbols and the appropriate mathematical aids.

The Program of Studies for Elementary Schools, Alberta Education, 1978 is the basis of the grade six mathematics program. The following should be considered an addendum when teaching a braille-using student and elaborates only on these objectives which require modification in scope, teaching strategies and/or materials.

At the beginning of each braille mathematics textbook there is a list of all the new braille symbols which will be introduced with a brief explanation of their meanirg. Students and teachers should refer to this section when encountering a new or unfamiliar braille notation.

## Numbers

The student:

Expresses halves, quarters and fifths as fractions or decimals.

Brailles decimal numerals using expanded notation.

Use drill to establish the decimal equivalents of all common fractions, e.g. $3 / 4=$ $.75,1 / 5=.2$.

Practise setting mexed numerals with common fractions on the abacus assuring decimal mark is placed correctly.

Note: Expanded notation is time consuming in braille. Once student understands basic format place emphasis on setting decimal numerals correctly on abacus.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| Numbers continued |  |  |
| The student: |  |  |
| ```Identifies place value to billions (.00001 - 1,000,000,000).``` | Provide counting practise. | Bundled toothpicks, popsicle sticks, etc. Counting frames with markers for decimals. Abacus. |
|  | Provide practise in comparing different numbers to determine largest, smallest, etc. and ordering a group of numbers. | Braille worksheets. Workbook exercises. |
|  | Provide practise in determining appropriate mark to use for decimal on abacus. | Abacus Made Easy. <br> Detailed Instruction of the Crammer Abacus. |

Identifies and orders integers.

Uses decimal fractions to express and solve for percent.

Introduce braille percent sign. Use abacus to solve for percent and self check with speech plus calculator.
OBJECTIVES
Operations and Properties

## The student:

## Measurement

Finds perimeter of polygons with and without formulae and area of triangles and quadralaterals using formulae.

Finds volume of rectangular solids using formulae.

Note: Although students should be able to perform addition, subtraction, multiplication and division operations on the braille, the abacus should now be used as the primary calculating device. Students should know all the abacus rules (secrets) and increasing proficiency should be encouraged. Student should estimate answer before beginning questions in order that they know if their final answers are reasonable. Since it is particularily easy to misplace decimal points on the abacus extra assistance may be required. Final answers should be checked on the speech plus calculator.

Review finding perimeter and area without using formulae using models. Ensure raised line drawings are clear and easily interpreted tactually.

Review finding volume by using concrete materials. Since raised line drawings of 3 dimensional objects are confusing present problem by simply stating the height, width and length of the solid.

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

Measurement continued

The student:

Reads distances according to a braille scale.

Draws diagrams according to a scale.

## Geometry

Identifies and names lines, line segments, rays, intersecting lines, parallel lines, perpendicular lines.

Translates, rotates, reflects, and enlarges 2-dimensional figures.

Begin with simple tactual diagrams of familiar places, e.g. classroom, livingroom. Review proportional ratios. When using braille maps construct a braille ruler which is the same scale as the scale on map. Have student place this "special scale ruler" between points.

Initially have student construct simple diagrams by using a graph board or a cork board with graph paper, pushpins and elastics. Expand to construction of simple raised line drawings.

Provide ample opportunity for student to explore and construct tactual drawings.

For reflection use braille graph paper with pins pushed through points of original figure. Fold on line of symmetry and push pins through folded paper to construct holes. Unfold and put pins in second figure.

For rotations use graph board or geo board.

For translations and enlargements use graph board.

Teacher made diagrams. Braille atlases.

Graph board.
Graph paper.
Sewell Raised Line Drawing Kit.

Sewell Raised Line Drawing Kit.

Braille graph paper, pushpins, graph board, geo board.

## Geometry continued

The student:
Constructs 3-D objects.

Graphing
Locates points in all four quadrants.

Note: Although three dimensional objects are difficult to construct for blind students simple constructions can be made using Lego or Mechano sets or styrofoam strips assembled with pushpins.

Use lots of teacher made graphs initially to develop student's skills in searching for points. Proceed with braille worksheets of ordered pairs. Have student place pins in appropriate point on graphic aid.

Use simple city maps to reinforce concept of quadrants.

Teacher made graphs and maps.
Graphic Aid.

## RESOURCES

## Level 3 - Braille-using Students

Recommended Teacher Reference Materials and Student Aids:

## Teacher:

1. Nemeth Code of Braille Mathematics and Specific Notation
2. Abacus Made Easy

## Student:

1. Sorting trays
2. Numberaids
3. Cuisenaire Rods
4. SAVI materials
5. Take Away Game
6. Braille Clock
7. Balance Scale
8. 3 Dimensional Geometric Models
9. Mitchell Wire Forms
10. Touch and Tell Books
11. Sewell Raised Line Drawing Kit
12. Abacus
13. Pegs and peg board
14. Braille Calendar
15. Polaido Blocks
16. The Master Cube
17. Geoboard
18. Braille graph paper
19. Braille Lebelon
20. Fraction Forms
21. Braille metric rulers
22. Level volume measures
23. Graphic Aid for Mathematics
24. Braille timer

## RESOURCES

## Level 4 - Braille-using Students

Recommended Teacher Reference Materials and Student Aids:

## Teacher:

1. Abacus Made Easy
2. Nemeth Code of Braille
3. Mathematics and Scientific Notation

## Student:

1. Abacus
2. Imperial dry measuring cups
3. Braille graph paper
4. Graphic Aid
5. Speech Plus Calculator
6. Braille Clockface and Watch
7. Science Measurement Kit
8. Braille ruler and tape measure
9. Braille thermometers
10. Graph Board
11. Braille Atlas
12. Sewell Raised Line Drawing Kit
13. Braille Timer

Note: Some materials are available for short term loan from the Materials Resource Center, Edmonton.

## MATHEMATICS FOR PARTIALLY SIGHTED STUDENTS

Levels 3 and 4, Grades $1-6$

## INTRODUCTION

In this curriculum guide the objectives for the partially sighted student are identical to those for sighted students in grades 1 through 12 as prescribed in the Mathematics sections of the Alberta Education Program of Studies.

However, although the course objectives are the same, it is not realistic to expect the partially sighted student to progress and to complete assignments at the same rate as the sighted student.

The partially sighted student will generally use print materials. Some optical aids such as the closed circuit television reading machine, a prescribed magnifying lens or telemonocular distance aid may be required by the student for use in reading and writing and for seeing the chalkboard.

It is expected that the teacher who has a partially sighted student in the class will use the curriculum guide and "The Visually Impaired Student in the Regular Classroom" section of the Special Education Handbook in conjunction with the appropriate Program of Studies and the regular mathematics curriculum guide for the particular level and grade.

The regular class teacher who has a partially sighted student in the classroom is not expected to know or use the specialized aids and appliances. The teacher will receive assistance from a trained itinerant teacher of the visually impaired or a special education consultant from Alberta Education. These resource personnel can give advice on the appropriate type of equipment and materials required and provide suggestions regarding adaptive methods that will assist the teacher in meeting student needs. Also, the teacher will have access to equipment and materials for students supplied on a free loan basis by the Materials Resource Centre (M.R.C.), Alberta Education, Edmonton.

## OBJECTIVES

## TEACHING STRATEGIES

MATERIALS

## INTRODUCTION

Although the objectives for the partially sighted student in grade 1 are the same as for sighted students, it is unrealistic to expect the student to progress at the same rate as the others. The student's readiness to begin the program should be assessed and the results of this assessment should form the basis for his early instruction. Where the student is should determine where the teacher will begin.

## Numbers

The student:

Operations and Properties

Measurement

Introduce the concept in the same sequence as for sighted students.

Use meaningful concrete materials, manipulative objects - beads, spoons, bowls, or pennies.

Use sorting trays with dividers.

For place values, use groups of objects in bundles, e.g. popsicle sticks.

Use verbal instruction with tactile materials to teach the processes of addition and subtraction.

Use manipulative objects for measuring and estimating activities, cup, plastic ice-cream pail, metre stick, standardized liquid containers.

Number Line.

Cuisenaire Rods.

Sorting trays.

Take Away Game.

Large print measuring devices (metre stick, litre containers).

Measurement continued

The student:

## Geometry

Note: Partially sighted students will need extra one-toone instruction in the areas of measurement.

Discuss time in relation to daily activities such as breakfast, recess, bedtime, etc.

Have students examine parts of the clock using a large print clock, but delay actual setting of time (to the exact hour or half-hour).

Use a large print calendar to help the student learn the concept of days and weeks.

Use tactual symbols to record weather on classroom calendar.

Assist students to recognize coins by size, edge and value.

Use appropriate records, fingerplays, and stories to reinforce learned concepts.

Discuss and examine tactually $3-D$ objects and models.

Have student classify, by manipulation, a wide variety of shapes according to the various attributes, e.g. round shapes: ball, button.

Large print clock.

Large print calendars.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| Geometry continued |  |  |
| The student: |  |  |
|  | Introduce circle, square, triangle with Touch and Tell Books and teacher made materials. | Touch and Tell Books. Brightly colored cardboard shapes. |
|  | For partially sighted students outline in heavy felt pen the appropriate drawings. Have student finger-trace to reinforce the concept. |  |
|  | Have students build 2-D triangles and rectangles with manipulative material, e.g. with popsicles sticks, straws and glue if required. |  |
|  | If necessary provide assistance in the transition from large to smaller pictorial | Visual Efficiency Scale. |

## Graphing

## INTRODUCTION

The partially sighted student should be assessed upon entry into grade 2 to determine the level of skills and achievement. Instruction should begin at this level. Although the objectives for the student in grade 2 are the same as for his peers, it is unrealistic to expect him to progress at the same rate as the others.

The abacus, a mathematical aid used in computation, may be used during the grade 2 year if the student has progressed sufficiently to be able to use it.

## Numbers

The student:

Measurement

Use the same sequence of concepts as for sighted students.

Use a variety of concrete manipulative materials to convey the concept of number.

Use teacher made bead sets and place-value boards to develop the concept of larger numbers.

Introduce the abacus to reinforce concept of place values (ones, tens, and hundreds).

Explore the concept of fractions by using both teacher made and commercially made models.

Use tactual aids for solving picture and word problems.

Introduce the concept of time in the same sequence as for sighted children. Use large print clocks and clock face sheets.

Number Line Device.

Workjobs. Teaching Aids.

Fractional Parts
of Whole.
Puzzle Form-Board Kit. Ten Spot Game.

Large print clockface Clockface sheets.
OBJECTIVES $\quad$ TEACHING STRATEGIES

## Measurement continued

The student:

Geometry

Introduce days, weeks and months using teacher made large print calendars.

Develop concept of measurement by means of additional practice with non-standard units (cups, pails, hand lengths) and standard units (metre, litre).

Introduce a variety of measuring devices and provide ample opportunities for experimentation.

Note: 1. Accuracy in measurement may be difficult for the student. Additional individual assistance may be necessary.
2. Teacher made thermometer can be used to convey the concept of temperature.

Note: 1. Additional materials (both 2-D and 3-D) may be used.
2. For the visually impaired student additional one-to-one instruction will be beneficial in order to allow transition from concrete materials to abstract raised line drawings.

Introduce raised line drawings for 2-D figures.

Use the geoboard for construction of 2-D figures.

Science Measurements Kits.

Heavy duty zipper glued to cardboard. Large print degrees printed alongside.

Geometric Aid and Volume Aid.

Geometric Forms. Graphic Aid for Mathematics.

The Master Cube.

Mitchel Wire Forms with Matched Planes and Volumes. Geoboard.

## Graphing

The student:

## ADDITIONAL SKILLS

## Abacus

Sets numerals from 0-999 and demonstrates understanding of place values.

Performs simple addition and subtraction without using "secrets"*.

Introduce graph construction using special graph paper (large print) and graph board.

Note: In gathering data from
the environment it may be beneficial for the partially sighted student to be paired with a sighted student. However, with special graph paper the partially sighted student should be able to construct most graphs. Large print paper is available for partially sighted students.

Note: *"Secrets" in the use of the abacus refer to sets of rules meant to be memorized by the student to help him in adding and subtracting.

Large print paper.

Aljacus.
Refer to available abacus instruction guides (see reference page).

## INTRODUCTION

The partially sighted student is expected to participate in the regular grade 3 mathematics program. However, although the objectives for this student are the same as for his sighted peers, it may be unrealistic to expect him to progress at the same rate. The partially sighted student's level of skill development and achievement in mathematics should determine where the instruction will begin.

## Numbers

The student:

Measurement
Continue to introduce concepts in the same sequence as for sighted students. (Refer to Grades 1 and 2.)

Introduce concept of thousands on abacus to reinforce place value concept.

Introduce concepts of multiplication of one digit numbers on abacus. Division using the abacus is not normally introduced until Grade 4.

Continue to provide ample opportunity to experiment with standard and non-standard units of measurement and provide extra one-to-one instruction. (Refer to Grade 2.)

Some flexibility should be allowed for the partially sighted student's degree of accuracy in measurement.
(References to additional materials and strategies can be found in Grade 2 program.)

## Geometry

## Graphing

The student:

## ADDITIONAL SKILLS

## Abacus

Sets numbers from 0-999 and demonstrates knowledge of place values.

Adds and subtracts 4-digit numbers using "secrets"*。

Multiplies 2-digit number by l-digit number.

Introduce concepts in the same sequence as for sighted students.

Refer to teaching strategies for Grades 1 and 2.
*"Secrets" in the use of the abacus refers to sets of rules meant to be memorized by the student to help him in adding and subtracting.

## MATERIALS

## INTRODUCTION

Regular classroom instruction should require only minor teaching strategy modifications from those used with sighted students. Teaching materials may, however, require considerable adaptation (comercially available or can be teacher made).

The partially sighted student may need extra assistance in interpreting diagrams and to insure meaningful conceptualization, e.g. how the parts relate to the whole. Models that provide for actual manipulation are often helpful.

It is important that the student be helped to develop good organization skills in order to avoid unnecessary mistakes through disorganized work habits.

Many partially sighted students will have begun typing at this level. The typewriter should be incorporated in the program when feasible as it is useful for quick answer questions that require minimal calculations, e.g. drill tests.

## Numbers

The student:

Number lines, for fractions and/or whole numbers should be drawn to a large scale in order that information can be readily interpreted and a reasonable amount of accuracy is assured.

Model number lines can be teacher or student made by using a graduated board with pegs, pins, and string or styrofoam, etc.

The abacus should be used for working out operations involving ratios and proportions.

Number Line Device. Sewell Raised Line Drawing Kit. Fractional Parts of Wholes.

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

Operations and Properties
The student:

Reference should be made to primary grade development of Operations and Properties.

Since recorded calculations are time consuming for partially sighted students, and require that they have the appropriate materials at hand, consideration should be given to developing mental arithmetic abilities. Finger mathematics methods, e.g. Chisanburg Method has also proven to be an effective program for the partially sighted.

Partially sighted students must be trained to pay extra attention to orderly step by step progression in developing calculations, particularly in multiplication and long division. Columns must be clearly alligned: e.g. graph paper may provide some assistance.

$$
\begin{array}{r}
4 \\
40 \\
7 8 \longdiv { 3 4 5 6 } \\
3120 \\
\hline 336 \\
-\frac{312}{24}
\end{array}
$$

Ensure that the partially sighted student is checking that he has transferred information and questions correctly from chalkboard to his work paper.

Education of the Visually Handicapped.
Mental Arithmetic
Development, p. 232.
Visually Impaired
Student in the Classroom.
Chisanbop Manual.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| Measurement |  |  |
| The student: |  |  |
|  | Note: Estimation and measurement will require more practice for partially sighted students. |  |
|  | For the partially sighted, clock faces must be large and clear. | Teacher made or commercially available. |
|  | Partially sighted students cannot be expected to read time to the second. An audio timing device (metronome) can be used to illustrate the second. | Clock face with Raised Ink-Print and Braille Numbers. |
|  | Meaningful raised line diagrams are all but impossible to produce for three dimensional geometric shapes. Consult with itinerant teacher, braillest or provincial consultant re: suitability of material. |  |
|  | For the partially sighted, make sure that materials used have simplicity and clarity for illustrations. Transparent overlays can be used to illustrate formations or inter-related materials. |  |
| Geometry | Refer to the geometry section in the Curriculum Guide for | Geometric Area and Volume Aid. |

Geometry continued
The student:

Graphing

Initially a "hands-on" approach is particularly important in introducing geometric figures and concepts. Use models and familiar objects whenever possible. In making transition to more abstract representation (either pictorial or raised line) make sure that diagrams are of adequate size, clear and contain no extraneous information

Motion geometry, by its very nature, poses special problems Appropriate 2-dimensional representation is nearly impossible at this level, use manipulative materials and models for the most basic concepts.

Origami (paper-folding) is useful to supplement instruction, e.g. finding the sum of the angles of a triangle.

In general, partially sighted students examine one thing at a time rather than having a panoramic view. They must, however, first examine all the different parts of a graph. Using this method they gradually gain a gestalt or overall understanding of total graphical representation. They then can proceed to interpret correctly specific information represented.

Geometric Forms. Mitchell Wire Forms with Matched Planes and Volumes. Geoboards.

Use of Geoboards to Teach Mathematics, Education of the Visually Impaired, May 1974.

The Use of Origami in the Mathematics Education of Visually Impaired Students, Education of the Visually Handicapped, March 1972.

Partially sighted enlarged graph paper.

## RESOURCES

Levels 3 and 4 - Partially Sighted Students

Recommended Teacher Reference Materials and Student Aids:

## Teacher:

1. Abacus Made Easy

Student:

1. Cuisinaire Rods
2. Sorting Trays
3. Take Away Game
4. Large Print Measuring Device
5. Large Print Block
6. Large Print Calendars
7. Mitchell Wire Forms
8. 3-Dimensional geometric models
9. Touch and Tell Books
10. Visual Efficiency Program
11. Fractional Parts of Whole
12. Puzzle Form Board Kit
13. Science Measurement Kit
14. Geometric Aid
15. Volume Aid
16. Graphic Aid for Mathematics
17. The Master Cube
18. Geoboard
19. Abacus
20. Sewell Raised Line Drawing Kit

Note: Some materials are available for short term loan from the Materials Resource Center, Edmonton.

## MATHEMATICS FOR VISUALLY IMPAIRED STUDENTS

Level 5, Grades 7 - 9, Junior High

## INTRODUCTION

The visually impaired student in the junior high school is usually integrated in regular classes for various subjects. He is expected to have acquired all the basic learning and independent skills required of all junior high students.

The blind (braille-using) student should be able to use the math tools, e.g. Perkins brailler abacus, raised line drawing kit, he used in the elementary school. He should also know the basic mathematical symbols in braille in the same way as other sighted students know the print symbols in their math texts. The blind student, however, will continue to learn to use new special math equipment, e.g. raised graph-board and other geometric instruments, and more advanced braille symbols as he progresses through the junior high school program.

With the help of certain optical aids most partially sighted (print-using) students do not need any special equipment. For some students large print math texts may be necessary.

The junior high school math teacher who instructs a visually impaires student should read the handbook section "The Visually Impaired Student in the Regular Classroom" and the curriculum guide for Elementary Visually Impaired Students for information and suggestions on the use of special equipment and adaptations of teaching methods. However, he is not expected to know braille and the use of specialized aids and appliances. The teacher is advised to contact the local itinerant teacher or an Alberta Education consultant for visually impaired students for assistance and information regarding equipment and materials supplied on a free loan basis by the Materials Resource Centre, Alberta Education, Edmonton.

The objectives used in this curriculum guide are identical to those prescribed in the Mathematics Program of Studies by Alberta Education for Junior High School students.
OBJECTIVES $\quad$ TEACHING STRATEGIES $\quad$ MATERIALS

NUMBER SYSTEMS

Concepts in Math

The student:

Braille Symbols

Factors and Factorization

Exponents, base, power, etc.
Use brailler and abacus wherever applicable. Teach braille-using students the new symbols. For most partially sighted students the indices, e.g. $x^{4}$, and $y^{\frac{1}{2}}$, are too small to read. Provide large print materials or have them use a hand magnifier.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| Ratio and Proportion, Percentage |  |  |
| The student: |  |  |
|  | Teach braille-using students the new symbols. Have them use the abacus to work out computations as with fractions. |  |
| GEOMETRY | Have braille-using students use rulers and scales designed with braille marks. Refer to available catalogues. | International Catalogue Guide to Aids and Appliances for the Blind. |
|  | Use special geometric tools for measuring angles and constructing figures, e.g. triangles, polygons, available for blind students. | Aids for Mathematics. |
|  | Use a raised line drawing kit for drawing symbols and figures which a blind or partially sighted student can examine with his fingers. Use this kit to illustrate graphic and pictorial constructions. | Sewell Raised Line Drawing Kit. |
|  | In the study of $3-\mathrm{D}$ figures, e.g. prism, pyramid, use | D.L.M. Catalogue. |

GEOMETRY continued

The student:

## GRAPHING

ALGEBRA

Most visually impaired students will need help on a one-to-one basis when they first learn to use the tools for constructing triangles, polygons, etc.

Use tactual materials when a blind student is required to construct graphs.

Use special graphboard for il-
lustration and construction.

Note: The braille-using student normally can work out algebraical equations and expressions on the brailler.

If large numbers are involved have student use either the abacus or the Speech Plus calculator to compute the numbers If partially sighted students find certain expressions or symbols difficult to read provide a hand magnifier.

Graphic Aid for Mathematics.

Speech Plus Talking Calculator.

# MATHEMATICS FOR VISUALLY IMPAIRED STUDENTS 

Level 6, Grades 10 - 12, Senior High

## INTRODUCTION

The visually impaired student should have acquired the necessary adaptive skills required for the study of mathematics by the time he enters senior high school. The braille-using student should be fairly efficient in the use of the basic specialized mathematics tools: the abacus, the raised line drawing kit, the brailler, the graphboard, braille geometric construction equipment, the talking calculator, a typewriter, etc. He should also know the mathematics braille symbols (from the Nemeth Code) which he has encountered in his braille texts supplied by the Materials Resource Centre (M.R.C.) of Alberta Education. The partially sighted student will continue to use print mathematics texts. He may have to use an enlarged edition from M.R.C. or use a CCTV (Closed Circuit Television reading machine) or other low vision aids if he finds the print in his text too small. Mathematics teachers in the senior high school can contact the student's itinerant teacher or an Alberta Education consultant to find out what specialized equipment and materials are available and how to obtain them from M.R.C.

Students usually have acquired the necessary skills resulting from adequate curriculum modifications in previous grade levels and few new adaptive measures are required at the senior high school level. The senior high school teacher is not expected to know braille or the use of specialized equipment and appliances that the visually impaired student uses. The teacher, however, should be aware of the student's ability to use the skills, and remedial assistance should be given if a weakuess is apparent. A high school student is expected to take on increasing responsibility for ensuring that he obtains the appropriate assistance he requires in his program.

The Alberta Education Program of Studies for senior high school mathematics includes a variety of programs for different specific objectives. For example, the sequence of courses in Mathematics $10,20,30,31$ is designed for students in the academic pattern. It is essential that the senior high school student (blind or partially sighted) be given adequate counselling in the selection of appropriate programs in order to minimize frustrations on the part of the teacher and student. Such counselling is important also because the mathematics program should be related to the career goals of the student when he leaves school for higher education, training and employment.

Some modifications may be necessary for Mathematics 15 and 25 as they relate to daily living problems. Teachers should feel free to modify the program to suit the needs and interests of the visually impaired student. For example, in Management of Personal Property of Math 25, blind students need some adapted approaches to deal with Automobile, Real Estate, Consumer Credit, etc. Teachers should consult with itinerant teachers or Alberta Education consultant regarding the selected materials, e.g. braille edition of Business Education texts from specific publichers and formats of certain subjects, e.g. balance sheets, budgets, etc. These resource personnel can assist in obtaining braille transcription services either from M.R.C. or local volunteer transcribers.

The handbook section, "The Visually Impaired Student in the Regular Classroom" contains useful suggestions about how a visually impaired student generally functions in a regular classroom. For example, it includes descriptions of how a visually impaired student does his assignments using a regular typewriter, the utilization of tactual or auditory devices, e.g. a cassette recorder, to assist him in regular class activities which require vision, and suggestions on how some simple adaptations of methods can be made by the regular class teacher.

The visually impaired student usually needs some special arrangements in taking tests and examinations. He should be allowed to take the same test or examination which can either be given orally or in written form. For a braille-using student, tests or examinations must be brailled ahead of time. A partially sighted student will need a question paper in good quality print. Large print may also be necessary. It is often necessary to allow more time, since braille reading is slower. Partially sighted students take longer to read the same amount of print material than the fully sighted students. An alternative is to reduce the test or examination and pro-rate the marks.

## RESOURCES

## Levels 5 and 6 - Visually Impaired Students

Recommended Teacher Reference Materials and Student Aids are as follows:

## Teacher:

1. Abacus Made Easy
2. Nemeth Code of Braille
3. Mathematics and Specific Notation

Note: Some materials are available for short term loan from the Materials Resource Centre, Edmonton.

Levels 3 and 4, Grades 1 - 6

## INTRODUCTION

The objectives of the Alberta Social Studies Curriculum, Grades 1 - 6, are identical for both sighted and visually impaired students. They are organized around three specific areas:

1. Value objectives: sensitivity to the value positions of oneself and others, and the ability to resolve conflicts of competing values;
2. Knowledge objectives: the acquisition of significant ideas from the past and the present;
3. Skill objectives: specific competencies that are required to conduct research at all stages of the inquiry process and to participate purposefully with other people in democratic processes.

These objectives are applicable to visually impaired as well as regular students. The variation comes in certain aspects of inquiry skills; specifically, the gathering and organization of data.

Visually impaired students can be integrated into the social studies program. Special Education Consultants from Alberta Education or itinerant teachers from the local school board can provide support and suggestions to the classroom teacher on how best to meet the needs of the student. The teacher should also refer to the handbook section "The Visually Impaired Student in the Regular Classroom".

Concrete experiences are very important for the development of concepts and meaning. An abundance of kinesthetic experience will enable the low vision child to achieve the necessary readiness level. Tactile identification for blind children should begin with objects, most familiar in the home or classroom: eating utensils, toys, books, clothes. At a later stage construction of models or the use of a sand box for setting up islands, bridges, and communities would enhance concept development and provide reinforcement.

Oral discussion and listening should also be stressed at an early age; there should be a reliance on verbal work rather than written. The student should be encouraged to make use of audio-visual equipment (closed circuit T.V., magnifying apparatus, cassette, tape recorder, etc.). As proficiency is gained in using these adaptive resource devices, the student should be encouraged to use them in the development of his inquiry skills and careful note-making for study purposes. Graphs, charts and maps may need to be adapted for the partially sighted student. Map puzzles, relief maps and relief globes are commercially available and most helpful in spatial orientation and topography.

Landform models and the accompanying "Doobie Tapes" (American Printing House for the Blind) provide instructional programs for backing 42 geographical features. The models are sets of three-dimensional tactual maps which introduce students to the concepts of:

1. land and water;
2. differences in elevation of simple land masses;
3. space and open areas;
4. relative sizes and outlines of partially enclosed bodies of water;
5. origin and directional flow of rivers;
6. various levels of elevation and;
7. other related basic geographical concepts.

These concepts are presented on tape in a "Sesame Street" format by a variety of interesting characters with stimulating auditory sound effects. The Doobie Landform Program helps the students develop the ability to give and receive verbal descriptions as well as learn how the landforms feel.

Another program, the Introduction to Map Study (A.P.H.) emphasizes teaching locational and directional referents within an environmental frame of reference in a logical and coherent way.

Various concept (near, far, left, right, north, south) and skills (vertical movement, horizontal movement, finding corners) are presented in a sequential pattern to allow movement from one geographical feature or reference point to another. The student also becomes familiar with symbols for land, lake, hills, road, bridge, river, tree and house. These symbols represent features the student can generally experience in his own environment and appear in introductory map reading activities in elementary social studies curricula.*

Considerable emphasis should be placed on the usefulness of maps to help the visually impaired student understand his environment. This, in turn, can improve his motivation to experience and explore and gain a better understanding of the world around him.

Enlargement of maps for partially sighted students can be done with the use of an overhead projector and tracing on large paper. If the projected image is too large for the paper the lens of the machine can be removed and set several inches in front of the projected path of light. This reduces normal projection size and enlarges an $8 \frac{1}{2} \times 11$ inch map to $12 \times 18$ inches. Various felt tip pens can be used for tracing. When illustrating complicated information, e.g. information on a weather map, several maps of the same size can be used with a limited amount of information on each.
*Students need this information in learning to travel independently.
(See Orientation and Mobility section.)

## SOCIAL STUDIES

Levels 5 and 6, Grades 7 - 12, Junior and Senior High

## INTRODUCTION

The objectives used in this curriculum guide are identical to those prescribed in the 1978 Alberta Social Studies Curriculum by Alberta Education.

By grade seven, the visually impaired student should have mastered the use of various pieces of equipment as well as the specialized materials that are available. The social studies teacher who instructs a visually impaired student is not expected to know braille and have expertise in the use of specialized aids and appliances. The teacher is advised to contact the local itinerant teacher or an Alberta Education Consultant for the Visually Impaired for assistance, and for information regarding equipment and materials supplied on a free loan basis by the Materials Resource Centre, Alberta Education, Edmonton.

Regular classroom instruction should require only minor teaching strategy modifications from those used with sighted students. The most difficult area for the visually impaired student will be the use of the multiple resources required for the inquiry approach. Two things should be noted:

1. the visually impaired student will have a slower reading rate than the sighted students;
2. not all resources will be available in large print braille or tape recorded format. A buddy system is suggested for oral reading of resources which are not available in the appropriate format. A smaller selection of readings should be assigned for the visually impaired student.

When visual materials such as slides and filmstrips are used as part of the inquiry, an oral description of the contents should be provided for the visually impaired student. This can be accomplished by screening the material either before or after the class has used it, and having a student volunteer describe the contents to the visually impaired student. In some cases, material with an audio track may not require the supplemental description.

## GENERAL STRATEGIES

1. Where possible, a "hands-on" approach for cultural and historical artifacts should be provided. If arranged in advance, many museums will permin visually impaired students to examine items tactually. Additional detailed verbal descriptions should be given to the visually impaired student regarding cultural, ethnic, and technological differences, because he will likely have limited experience with these.
2. The student should be provided with additional aids for graphing, such as a graphboard, braille graph paper, and a Sewell Raised Line Drawing Kit for braille students, and large print graph paper for partially sighted students.
3. If historical maps and documents are unabailable in braille and large print, group work for this should be encouraged, whereby group members read and interpret to the visually impaired student while he records notes.
4. The visually impaired student should be encouraged to use braille or large print dictionaries and atlases. Excerpts from more specific references such as the "Canada Year Book" can be taped or read aloud to the student.
5. Comprehensive radio and television newscasts rather than newspapers can be used to gather current information. Some newspapers and periodicals are available in braille, large print, and tape, but are usually outdated by the time they are received. However, the student will benefit from these to learn format and style.
6. The visually impaired student will require extra time when preparing reports and essays using the inquiry approach. This is necessary because he will be typing one copy for the teacher as well as preparing one copy in a format that is useful to himself, e.g. braille, large print or tape recorded.

The student should be encouraged to make a carbon copy when typing. This will eliminate problems that can occur such as a malfunctioning ribbon, or no ribbon in the typewriter. For additional comments about typing, please refer to the handbook section, "The Visually Impaired Student in the Regular Classroom"
7. The visually impaired student usually needs some special arrangements in test situations. Some tests may best be transcribed to braille or large print or given orally. For the visually impaired student, braille and large print takes longer to read, so it will be necessary to allow extra time. It should be noted that multiple choice questions are particularly tedious for the visually impaired because of the time required for rereading and choosing answers. A selection should be made from the multiple choice questions and the marks pro-rated. Short answer type questions tend to be the most satisfactory. If necessary, a double sitting for a long test is a reasonable alternative, providing test security can be maintained.
8. Spelling is often difficult for visually impaired students, particularly braille-users, because of the contractions that are used in braille. Therefore, new vocabulary should be spelled, and correct spelling by the student should be encouraged. Core vocabulary lists for units are helpful and should be supplied well in advance.

```
American Printing House for the Blind
    1839 Frankfort Avenue
            P.O. Box }608
Louisville, Kentucky 40206
    U.S.A.
```

1. Pedestal globe with base, raised longitude and latitude lines; Equator; Artic and Antarctic Circles.
2. Geophysical model globe, full relief, raised longitude and latitude lines, indented line at the Equator; areas painted with special textured paint to aid tactual exploration and to distinguish between land and water surface.
3. Panoramic model globes, full relief; raised latitude and longitude lines and a thin rim circling the Equator; land elevations exaggerated in comparison with horizontal distances to enhance tactual exploration; textured paint for land areas.
4. Plaques, of major global areas; raised land areas to distinguish continents from bodies of water.
5. Braille atlases, of all global areas, continents, states and provinces, plysical and political.
6. Landform models, set of three dimensional tactual maps illustrating 40 geographical concepts.
7. Dissected maps of continents, flat and in relief; individual outlines can be lifted out for easy examination.
8. Simplified continental relief maps, contain prominent geographical features with land areas slightly raised; major river valleys represented by wide cuts in the land areas; oceans and other water areas are textured.
9. Large type outline maps, printed in black ink on a regular buff antiquefinish paper; linear scale on each map.
10. An Introduction to Map Study, teaches concepts of location and direction.

## SCIENCE

Levels 3 and 4, Grades 1 - 6

## INTRODUCTION

The philosophy and objectives of the Alberta Elementary Science Curriculum are identical for both sighted and visually impaired students. A strong emphasis is placed on developing ways to gain and process information through concrete learning experiences. This involves encouraging and stimulating children's natural curiosity through exploration and discovery, with emphasis on a "hands-on" approach.

The elementary science school teacher is not expected to be a specialist in the techniques of teaching visually impaired students or have expertise in material and equipment these students may use. He is advised to contact the local itinerant teacher or an Alberta Education consultant for assistance and information.

The major skills emphasized in Division One are:

1. Observing - observing information about objects and events using all the senses;
2. Classifying - organizing objects and events according to common properties;
3. Measuring - comparing objects with agreed upon standards;
4. Communicating - describing objects in a manner that can be interpreted by others.

The major skills emphasized in Division Two are:

1. Inferring - reaching a conclusion based on direct or indirect observation;
2. Predicting - making predictions based on a sequence of observation;
3. Interpreting Data - getting the most out of data.

One of the best programs developed for the visually impaired is Science Activities for the Visually Impaired (SAVI). Researched by the University of California, SAVI dovetails nicely with the major skill objectives outlined in the Alberta Elementary Science Curriculum Guide, 1979. Students are introduced to key concepts in the physical and life sciences in a multi-sensory way, and challenged to put their ears, noses, hands, and (whenever possible) their eyes to work making predictions, carrying out experiments, and then drawing conclusions from the outcomes. Because this is a materials-centered program, students are encouraged to manipulate objects and organisms in the activities. They can work effectively in teams of two, three and four sighted people.

SAVI is eminently adaptable; it can be used as a special project for the visually impaired pupil who can work independently, or integrated into the existing program. It is excellent as a supplement to the existing science curriculum or as the foundation for it.

One of the most exciting outcomes of the SAVI experience, according to its researchers, is student growth in the area of self-confidence or how the student sees himself. This process can have all sorts of positive ramifications. For example, a student who becomes knowledgeable in a particular area can share his information and conclusions with his peers.

The program is divided into 4 modules:

1. The Structures of Life Module;
2. Scientific Reasoning Module;
3. Communication Module;
4. Environments Module.

The Structures of Life Module is concerned with biology. Students are introduced to a number of living organisms and they are offered an opportunity to interact with them in a mix of open-ended explorations and more structured activities. Areas covered are "Origin of Seeds", "The Sprouting Seed", "Roots", "Meet the Crayfish" and "Snail Pull".

The Scientific Reasoning Module is designed to develop skills in making observations and processing the information. The activities allow the students to gain experience with metric measurement, listen to their own heartbeats, and increase their motor skills by manipulating such diverse objects as a balloon rocket and floating raft.

The Communication Module contains 4 activities dealing with several aspects of sound, namely, sound sources, sound receivers, sound amplification and sound discrimination. The activities are designed to help the students learn something about the nature of sound, and apply this newly acquired knowledge in a way that enriches their daily lives. "Dropping In", "Small Sounds, Big Ears", "What's Your Pitch?" and "Vibration = Sound" are four activities which make use of a variety of motor skills and sensory input.

The Environments Module introduces the students to the concept of environment and provides them with a means of discovering which factors in an organism's environment make it a suitable place to live. "Environmental Plantings", "Sea What Grows", "Isopods" and "The Wanted Weed" are the activities in this module designed to help students experience several different environments and make investigations in an outdoor setting.

Each of the SAVI modules fits into the concepts outlined in the curriculum guide. The Structures of Life Module, for example, closely parallels The Living Things and Environment (Division I), as found on pages 22-23 of the guide. The Energy Concept (p. 29, guide) is similar to the SAVI Communication Module.

## SCIENCE

Level 5, Grades 7 - 9, Junior High

## INTRODUCTION

The five major objectives used in this curriculum guide are identical to those prescribed by Alberta Education in the 1978 Junior High School Science Curriculum Guide. Only slight adaptations should be necessary for visually impaired students to attain these objectives.

By grade seven, the visually impaired student should have mastered the use of various pieces of equipment and available specialized materials. The secondary science teacher who instructs a visually impaired student is not expected to know braille or how to use specialized aids and appliances. The teacher is advised to contact the local itinerant teacher or an Alberta Education Consultant for the Visually Impaired for assistance and for information regarding equipment and materials supplied on a free loan basis by the Materials Resource Centre, Alberta Education, Edmonton.

## GENERAL STRATEGIES

1. Process Skills

The curriculum identifies sixteen process skills that are considered to be an essential part of the student's learning. The first of these is observing using all of the senses. This will be the key for the visually impaired student because through the use of all of his senses, most other process skills can be mastered.
2. Commercial Aids

Commercially made aids for the visually impaired can be used to enhance the learning experience in other skills. Particularly useful are those items produced by the American Printing House for the Blind. These are primarily for blind students, although some partially sighted students will find them useful.
a. Science Measurements Kit: includes

- 1 dial thermometer and a description;
- 1 - 12 inch ruler with caliper guide, showing both inches and centimeters;
- l spring (dial) balance, showing both grams and ounces;
- l pan balance;
- assorted gram weights:

| $1-1$ gram | $2-10$ gram | $2-100$ gram |
| :--- | :--- | :--- |
| $2-2$ gram | $1-20$ gram | $1-200 \mathrm{gram}$ |
| $1-5$ gram | $1-50$ gram | $1-500 \mathrm{gram} ;$ |

- l overflow can;
- 1 catch can;
- 8 - $1 \frac{1}{4}$ inch square blocks: 4 (with hooks) made of metal, e.g. aluminium, iron, brass and lead; 4 made of assorted materials, e.g. balsa, cork, pine and oak;
- 4 - 1 cubic inch gravity specimens made of aluminium, iron, brass, and lead.
b. Introductory Simple Machine Kit: includes description and
- lever;
- inclined plane;
- wheel and axle;
- pulley;
- wedge.
c. Insect Identification: consists of 5 vacuum - formed plastic sheets illustrating a spider, earthworm, ant, beetle, and bee.
d. Biological Models Kit: consists of 19 rectangular shaped models representing invertebrate and plant phyla. Included are: clam, grasshopper, planaria, root, sponge, earthworm (cross-section), hydra, woody stem, flower, starfish, paramecium, root tip, leaf, and bean seed.
e. Pull Apart Cell Model: identifies basic structural features both tactually and chromatically.
f. Graphing Board: rubber grid with metal strips that is used to demonstrate graphs and basic geometric shapes.
g. Sewell Raised Line Drawing Kit: enables user to produce raised line drawings on a sheet of plastic.
h. General purpose items such as a braille timer and a liquid level indicator.

3. Models and Diagrams

It should be noted that models and braille diagrams alone will not contribute to the development of accurate concepts. These should be supplemented with additional verbal explanations. For example, a braille student probable will not have examined a real frog, and when given a model of a frog he will likely not realize the differences in size and texture between the real and the model. A detailed explanation is probably necessary. Whenever possible, have the student examine actual items rather than plastic replicas.
4. Experiments

A visually impaired student will need to work with a partner or in a group during experiments. The blind student should participate in the actual experiments whenever possible. Partially sighted students will have difficulty with activities using microscopes and telescopes, however, they should participate in the activities even though they will need their partner to explain the details of the viewing.
5. Optional Units

Certain optional units may be less meaningful than others for the visually impaired student. It may be more beneficial to the student to do an individual study project which is consistent with general program objectives. It must be emphasized that independent study projects should not be the basis of the visually impaired student's science program, but should be used only when the classroom material will not be as useful to the student as would be individual study.
6. Reproduction of Reports

The visually impaired student will require extra time when preparing reports. This is necessary because he will be typing one copy for the teacher as well as preparing one copy in a format that is useful to himself, e.g. braille, large print, or tape recorded. The student should be encouraged to make a carbon copy when typing. This will eliminate problems such as a malfunctioning ribbon, or no ribbon in the typewriter. For additional comments about typing, teachers should refer to the handbook section "The Visually Impaired Student in the Regular Classroom".
7. Testing

The visually impaired student usually needs some special arrangements in test situations. Some tests may best be transcribed to braille or large print particularly if the format is simple. Other tests may best be given orally. For the visually impaired student, braille and large print take longer to read, so it will be necessary to allow extra time. It should be noted that multiple choice questions are particularly tedious for the visually impaired because of the time required for rereading and choosing answers. A selection should be made from the multiple choice questions, the marks pro-rated or the format altered. Short answer type questions tend to be the most satisfactory. If necessary, a double sitting for a long test is a reasonable alternative, providing test security can be maintained.

The teacher is advised to consult the evaluation section in "The Visually Impaired Student in the Regular Classroom", and the itinerant teacher or Consultant for the Visually Impaired for further information.

## SCIENCE

Level 6, Grades 10 - 12, Senior High (Biology, Chemistry, Physics, Science 11)

## INTRODUCTION

Factors which influence the success of a visually impaired student in the high school science programs include the experimental basis of the subject matter, the limitations of the student's concept development, the vast amounts of materials requiring visual observations, and the scientific notations which demand complex reading skills in braille or large print.

Biology is generally appropriate for visually impaired students. The subtle visual changes that occur in experiments involving chemical change and the completing of equations and molecular structures, etc. may create special problems for the visually impaired student in chemistry programs. The experiments required in physics classes may prove to be difficult for certain visually impaired students.

If the visually impaired student has demonstrated success in junior high science and has indicated a desire for senior level science courses, then the teacher should discuss course selection with both the student and the Itinerant Teacher or the Alberta Education Consultant for the Visually Impaired. If the student has had limited success with junior high science, then Science eleven would be the logical choice for the required high school science credits.

By g:ade ten, the visually impaired student will have mastered the use of various pieces of equipment as well as specialized materials that are available. The science teacher who instructs a visually impaired student is not expected to know braille and have expertise in the use of specialized aids and appliances. The teacher is advised to contact an Itinerant Teacher or an Alberta Education Consultant for the Visually Impaired for assistance and information regarding equipment and materials supplied on a free loan basis by the Materials Resource Centre, Alberta Education, Edmonton.

## GENERAL STRATEGIES

1. Commercial Aids

Commercially available aids for the visually impaired can be used to enhance the learning experience. Particularly useful are those items produced by the American Printing House for the Blind. These are primarily for blind students although some partially sighted students will find them useful.
a. Insect Identification Kit: consists of 5 vacuum formed plastic sheets illustrating a spider, earthworm, ant, beetle, and bee.
b. Biological Models Kit: consists of 19 rectangular shaped models representing invertebrate and plant phyla. Included are clam, grasshopper, planaria, root, sponge, earthworm (cross-section), hydra, woody stem, flower, starfish, paramectium, root tip, leaf, and bean seed.
c. Pull Apart Cell Model: used to identify basic structural features both tactually and chromatically.
d. Graphing Board: rubber grid with metal strips that is used to demonstrate graphs and basic geometric shapes.
e. Sewell Raised Line Drawing Kit: used to produce raised line drawings on a sheet of plastic.
f. General purpose items such as braille timers, and a liquid level indicator.
g. Math aids such as a speech plus calculator (auditory output), and a braille geometry set.
2. Locally Available Aids

Many aids for sighted students can be very useful for visually impaired students. Items supplied by local science resource centres or science consultants are excellent, e.g. stuffed animals, live animals, plant seedlings and assorted models.
3. Models and Diagrams

Tactile models and braille diagrams should be supplemented by additional verbal explanations. For example, the braille student will probably not have examined a real frog, and if given a plastic model frog will likely not realize the difference in size and texture between the real object and the model without detailed verbal explanations. Whenever possible, have the student examine actual items rather than plastic replicas.
4. Experiments

A visually impaired student will need to work with a partner or in a group during experiments. The blind student should participate in the actual experiments whenever possible. Partially sighted students will have difficulty with activities even though they will need their partner to explain the details of the viewing.
5. Preparation of Reports

The visually impaired student will require extra time when preparing reports. This is necessary because he will be typing one copy for the teacher as well as preparing one copy in a format that is useful to himself, e.g. braille, large print or tape recorded.

The student should be encouraged to make a carbon copy when typing. This will eliminate problems that can occur such as a malfunctioning ribbon or no ribbon in the typewriter. For additional comments about typing, please refer to the handbook section, "The Visually Impaired Student in the Regular Class room".

## 6. Testing

The visually impaired student usually needs some special arrangements in test situations. Same test may best be transcribed to braille or large print or the test can be given orally. For the visually impaired student, braille and large print take longer to read, so it will be necessary to allow extra time. It should be noted that multiple choice questions are particularly tedious for the visually impaıred because of the time required for rereading and choosing answers. A selection should be made from the multiple choice questions and the marks pro-rated. Short answer type questions tend to be the most satisfactory. If necessary, a double sitting for a long test is a reasonable alternative, providing test security can be maintained. The teacher is advised to consult the evaluation section in "The Visually Impaired Student in the Regular Classroom".

## RESOURCES

SAVI (Science Activities for the Visually Impaired) can be used as a core science program for the visually impaired or as a useful supplement to a regular program. These activities are excellent for both visually impaired and sighted students. They are available from:

Lawrence Hall of Science University of California Berkeley, CA. 94702

Materials useful for measurement and/or as teaching aids are available for short term loan from the Materials Resource Centre, Edmonton. They may also be purchased from:

American Printing House for the Blind 1839 Frankfort Avenue P.O. Box 6085<br>Louisville, Kentucky 40206

These include:

1. Science Measurements Kit
2. Introductory Simple Machine Kit
3. Insect Identification Kit
4. Biological Models Kit
5. Pull Apart Cell Model
6. Graphing Board
7. Sewell Raised Line Drawing Kit

Teachers should refer to "The Visually Impaired Student in the Regular Classroom" for additional information.

## IIVInG VOCATIONAL SHIlls seCTIOn

## TABLE OF CONTENTS

ACKNOWLEDGEMENTS ..... i
INTRODUCTION ..... ii
LEVEL 1
A. Introduction
A. Introduction ..... 161 ..... 161
B. Assessment/Programming Projects ..... 161
LEVEL 2
UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
A. Knowledge of Self ..... 166
B. Social Relationships ..... 169
ORIENTATION AND MOBILITY
Introduction ..... 173
A. Body Image ..... 174
B. Basic Concepts ..... 178
C. Motor Coordination ..... 180
D. Sensory Modalities ..... 183
HEALTH
A. Nutrition ..... 187
B. Personal Care ..... 189
C. Community Health Services ..... 190
SAFETY
A. In the Home ..... 191
B. In the School ..... 192
C. In the Community ..... 193 ..... 193
D. Fire ..... 194 ..... 194
E. Traffic ..... 195
WORLD OF WORK
A. Specific and Allied Work Skills ..... 196
B. Career Planning and Exploration ..... 198
C. Finding a Job ..... 199
HOME MANAGEMENT
A. Clothing ..... 200
B. Food ..... 202
C. Maintaining the Home ..... 205
MONEY MANAGEMENT
A. Earning Money ..... 206
B. Spending Money ..... 207
MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES ..... 208
FINE ARTS AND INDIVIDUAL EXPRESSION
A. Music ..... 209
B. Art ..... 211
C. Drama ..... 215
LEVEL 2 (CONT ${ }^{\text { }}$.)
CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
A. At Home ..... 216
B. At School ..... 218
C. In the Community ..... 220
D. Current Events ..... 221
E. Environmental Education ..... 222
LEVEL 3
UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
A. Knowledge of Self ..... 228
B. Social Relationships ..... 232
ORIENTATION AND MOBILITY
Introduction ..... 238
A. Body Image ..... 239
B. Basic Concepts ..... 243
C. Motor Coordination ..... 245
D. Sensory Modalities ..... 248
HEALTH
A. Nutrition ..... 252
B. Personal Care ..... 253
C. Community Health Services ..... 255
SAFETY
A. In the Home ..... 256
B. In the School ..... 257
C. In the Community ..... 258
D. Fire ..... 259
E. Traffic ..... 261
WORLD OF WORK
A. Specific and Allied Work Skills ..... 262
B. Career Planning and Exploration ..... 264
C. Finding a Job ..... 266
E. Worker's Rights ..... 267
HOME MANAGEMENT
A. Clothing ..... 268
B. Food ..... 271
C. Maintaining the Home ..... 274
D. Child Care ..... 276
MONEY MANAGEMENT
A. Earning Money ..... 277
B. Spending Money ..... 279
C. Saving and Borrowing ..... 280
MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES
A. Fundamentals of Movement ..... 281
B. Games and Activities ..... 285
FINE ARTS AND INDIVIDUAL EXPRESSION
A. Music ..... 288
B. Art ..... 293
C. Drama ..... 297
D. Leisure Time Activities ..... 299
LEVEL 3 (CONT'D.)
CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
A. Home and Family ..... 300
B. School ..... 301
C. Community and Country ..... 302
D. Current Events ..... 303
E. Environmental Education ..... 304
LEVEL 4
UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
A. Knowledge of Self ..... 309
B. Social Relationships ..... 312
HEALTH
A. Nutrition ..... 318
B. Personal Care ..... 319
C. Community Health Services ..... 321
SAFETY
A. In the Home ..... 322
B. In the School ..... 323
C. In the Community ..... 324
D. Fire ..... 325
E. Traffic ..... 326
WORLD OF WORK
A. Specific and Allied Work Skills ..... 327
B. Career Planning and Exploration ..... 329
C. Finding a Job ..... 331
E. Worker's Rights ..... 333
HOME MANAGEMENT
A. Clothing ..... 334
B. Food ..... 336
C. Maintaining the Home ..... 339
D. Child Care ..... 340
MONEY MANAGEMENT
A. Earning Money ..... 341
B. Spending Money ..... 343
C. Saving and Borrowing ..... 345
MOTOR DEVELOPMENT AND PHYSICAL ACTIVI'IIES
A. Fundamentals of Movement ..... 346
B. Games and Activities ..... 347
FINE ARTS AND INDIVIDUAL EXPRESSION
A. Music ..... 350
B. Art ..... 355
C. Drama ..... 358
D. Leisure Time Activities ..... 360
CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
A. Home and Family ..... 361
B. School ..... 362
C. Community and Country ..... 363
D. Current Events ..... 365
E. Environmental Education ..... 366
LEVEL 5
UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
A. Knowledge of Self ..... 370
B. Social Relationships ..... 373
HEALTH
A. Nutrition ..... 379
B. Personal Care ..... 380
C. Community Health Services ..... 382
SAFETY
A. In the Home ..... 383
B. In the School ..... 384
C. In the Community ..... 385
D. Fire ..... 386
E. Traffic ..... 387
WORLD OF WORK
A. Specific and Allied Work Skills ..... 388
B. Career Planning and Exploration ..... 390
C. Finding a Job ..... 393
D. Keeping a Job ..... 396
E. Worker's Rights ..... 397
HOME MANAGEMENT
A. Clothing ..... 398
B. Food ..... 401
C. Maintaining the Home ..... 404
D. Child Care ..... 406
MONEY MANAGEMENT
A. Earning Money ..... 407
B. Spending Money ..... 409
C. Saving and Borrowing ..... 412
MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES
A. Fundamentals of Movement ..... 413
B. Games and Activities ..... 414
FINE ARTS AND INDIVIDUAL EXPRESSION
A. Music ..... 417
B. Art ..... 422
C. Drama ..... 426
D. Leisure Time Activities ..... 429
CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
A. Home and Family ..... 430
B. At School ..... 431
C. Community and Country ..... 432
D. Current Events ..... 433
E. Environmental Education ..... 434
LEVEL 6
UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
A. Knowledge of Self ..... 438
B. Social Relationships ..... 441
LEVEL 6 (CONT'D.)
HEALTH
A. Nutrition ..... 446
B. Personal Care ..... 447
C. Community Health Services ..... 449
SAFETY
A. and B. Home and School ..... 450
D. Fire ..... 451
E. Traffic ..... 452
WORLD OF WORK
A. Specific and Allied Work Skills ..... 453
B. Career Planning and Exploration ..... 455
C. Finding a Job ..... 457
D. Keeping a Job ..... 460
E. Worker's Rights ..... 461
HOME MANAGEMENT
A. Clothing ..... 462
B . Food ..... 464
C. Maintaining the Home ..... 466
D. Child Care ..... 468
MONEY MANAGEMENT
A. Earning Money ..... 469
B. Spending Money ..... 470
C. Saving and Borrowing ..... 472
MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES
A. Fundamentals of Movement ..... 473
B. Games and Activities ..... 474
FINE ARTS AND INDIVIDUAL EXPRESSION
A. Music ..... 477
B. Art ..... 482
C. Drama ..... 485
D. Leisure Time Activities ..... 490
CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
A. At Home ..... 491
B. At School ..... 492
C. Community and Country ..... 493
D. Current Events ..... 495
E. Environmental Education ..... 496
APPENDIX A - Overview ..... 500
APPENDIX B - Student Profile/Checklist ..... 571
APPENDIX C - Resources ..... 578

## ACKNOWLEDGEMENTS

The following persons have contributed to the Living/Vocational Skills Section of the Curriculum Guide for the Visually Impaired. Their assistance is gratefully acknowledged.

The Special Education Curriculum Coordinating Committee;
The Visually Impaired Policy Committee;
The Visually Impaired Living/Vocational Skills Committee, with the following additional persons:

Rosemary Elaschuk, Itinerant Teacher for the Visually Impaired, Edmonton Public School Board;
Judy Miller, Itinerant Teacher for the Visually Impaired, Edmonton Public School Board;
Lynne Kest Patching, Early Childhood Services Teacher, Edmonton Public School Board;
Margaret Powell, Itinerant Teacher for the Visually Impaired, Edmonton Public School Board.

## INTRODUCTION

It is essential to understand that teaching a blind child academic skills is only one aspect of the child's total education. Activities of daily living, motor development, skills of socialization orientation and mobility, motor development, and career awareness are essential in developing independence and responsibility as adults.

This Living/Vocational Skills section of the curriculum guide for the visually impaired was developed to help visually impaired students develop the proper methods for preparing familiar tasks in an efficient and confident manner in order to gain independence.

This section may be utilized to meet the needs of braille-using and partially sighted students at the various levels. It contains objectives, strategies and materials for teaching various skills.

Teachers are urged to read the Special Education Handbook section "The Visually Impaired Student in the Regular Classroom" before implementing the curriculum.

## LIVING/VOCATIONAL SKILLS

Level 1

## A. INTRODUCTION

There is wide acceptance throughout North American for the provision of early intervention programs for children with special needs. Handicapped infants need such help as early as possible in order to overcome the delays in development caused by such conditions. In the case of the visually impaired infant, there is obvious need for a wide range of "hands-on" experiences, guided by a knowledgeable adult, and accompanied by appropriate verbal descriptions to explain the world to the child.

The first step in the provision of a developmental program must be a thorough assessment of the functioning level of the infant. Work begins where the child needs assistance to promote developmental growth and proceeds at his individual rate. Care should be taken to record the child's progress through the sequence of tasks both to avoid unnecessary repetition and to demonstrate to parents that progress is indeed being made.

The home teacher serves a number of functions not the least of which is to provide support and help to the parents. She will need to be fully cognizant of all the resources of people, materials and monies available within the community and how these can be obtained to meet the child's needs. She must be adaptable in her approach to each individual child and his family and sensitive to their needs.

The following section describes in some detail three commercially available programming packages for use by early intervention home programmers. All are designed to aid in maximizing the progress of children with handicaps. The decision about which program to use will depend on a number of factors, including funds available to and person biases of each home programmer. Inservice training for users must be provided before such programs are begun.

## B. ASSESSMENT/PROGRAMMING PROJECTS

Three of the assessment/programming projects which are available for visually impaired children from birth to 3 years are:
a. "The Oregon Project for the Visually Impaired and Blind Preschool Children", Jackson County Education Service District, Medford, Oregon. (Revised Edition.)
b. "Guide to Early Developmental Training", Wabash Centre for the Mentally Retarded, Ind., Ally and Bacon, Inc., Boston, Massachusetts.
c. Guide: A Developmental Skills Attainment System (formerly "Project Vision-Up"), U.S. Dept. of Health, Education and Welfare, 1976.

A comparison study has been completed on these programs and recommendations have been made as to their strengths and weaknesses in the following areas:
a. Oregon Project - These materials are well organized by developmental area with easily used index dividers. It is in a 3-ring binder making it very portable. Althouth there is a small bibliography, there is no "table of contents" for the various activities. The activity sheets are not numbered and if the pages were removed, it may be difficult to keep the kit together. There is no direct cross-referencing of materials but there is an indication on some cards of "review activities".
b. Wabash Guide - A primary concern lies in the stigma associated with name of program publishers: Centre for the Mentally Retarded. Initially the binder appears to be overwhelming in the large quantity of materials it contains. However, upon closer examination, it is found to be compact and all in a 3 -ring binder which is easy to transport. It is divided into five different training areas. All the materials are cross-referenced many times which provides excellent access to materials. The checklists are comprehensive. It includes indexes, and bibliographies which are also cross-referenced as well as a glossary and equipment lists. There are many alternate activities included, and hints and notes which anticipate different responses.
c. Guide (Vision-Up) - This project is also well-organized but the entire program is on large cards which are very cumbersome for transporting. The materials could easily be lost or constantly out of sequence as a result of the organizational format. The materials are color coded as to developmental area but there is no index or bibliography. There is a cross-referencing system built into the program but it is difficult to decipher.
2. Assessment Function
a. Oregon Project - A separate coiled booklet is available for recording assessment information. This project employs a clinical approach and uses a "Skills Inventory Checklist" in six developmental areas. Assessment procedures are dependent upon consultation with the parents. Dates when objectives are achieved can be charted on the checklist. A "student profile" graphs the child's progress. The process is easy and not timeconsuming.
b. Wabash Guide - Although this project also employs a clinical approach, there is a greater emphasis put on making the assessment fun for the child. The checklists are specifically broken down into skills sections within each developmental area. There is more emphasis on diagnostic assessment and the objectives are cross-referenced in the checklist to assist in training. There is no graph to indicate progress. The checklists would be easy to fill out and would not take great amounts of time.
c. Guide (Vision-Up) - This project contains a clinical assessment tool which is most comprehensive, but time consuming. The process involves several sequential steps, and is more involved, which may be burdensome. The assessment is designed to include the participation of parents. The "cards" used could be easily misplaced or disorganized because of the loose format. A good graph is available to indicate progress.
3. Target Group
a. Oregon Project - The skills are divided into age levels of $0-1,1-2$, $3-4,5-6$ years. The project has been specifically designed to meet the needs of children with visual deficits.
b. Wabash Guide - The program is aimed at pre-school age children who are developmentally delayed in any area. The skills are divided according to sequential progress in specific tasks rather than by age levels. It is not specially designed for the visually impaired.
c. Guide (Vision-Up) - This project is a revision of the "Portage Program" and has been specially designed for children with visual deficits. It is also divided into age levels with appropriate skills assigned to each age level up to six years of age.
4. Cost
a. Oregon Project - This complete program with assessment booklet costs approximately $\$ 50$.
b. Wabash Guide - This binder of materials costs approximately $\$ 35$.
c. Guide (Vision-Up) - This project costs approximately $\$ 140$.
3. Ease of Use
a. Oregon Project - The skills are numbered in developmental areas with a specific objective under each heading. There are two objectives on each side of the page with simple steps, in point form, to follow in order to achieve the goal. Precautions are noted in these directions, and areas are flagged for skills which may be slow in developing. There is much explanation for each activity which would make the procedures easy for anyone to carry out. There would be little or no inservice required before implementing this program.
b. Wabash Guide - The goals are less specified with more flexibility in the training activities. The goals are numbered and outlined according to equipment, actions, possible responses. There are effective notes and tips for the activities which attempt to anticipate problems the child may encounter. It would be difficult to remove specific goals from the binder as they are not written on separate sheets. It would probably be necessary to have in-service training before implementing this project as some activities would have to be eliminated for the blind and adapted for the partially sighted.
c. Guide (Vision-Up) - Each skill is outlined on a different cardboard card. This allows each card to be given out separately for use with a particular child. The skills are broken down into small components and each goal is followed by specific step-by-step directions for each activity. There are few additional notes or hints on each card to assist in training.

## a. Motor

(1) Oregon Project - The gross motor skills section emphasizes "locomotion" activities and includes some activities related to balance and posture but not specifically separated.

The fine motor skills section contains objectives for both blind and partially sighted children with several activities outlined for each goal.
(2) Wabash Guide - The motor training section of this guide is most comprehensive and includes many different activities to achieve the goals in the areas of balance and posture, perceptual motor, locomotion and body image. This is an extension section with much variety but inappropriate activities would have to be determined and eliminated.
(3) Guide (Vision-Up) - The motor section of this project is more limited in the variety of activity suggestions. It also emphasizes locomotion activities but does incorporate body image, balance and posture activities in these objectives.
b. Self-Help
(1) Oregon Project - The goals are divided according to age level and are not separated into skills area.
(2) Wabash Guide - Self-help activities are extensive and are divided according to toileting, eating, dressing, grooming and hygiene, beginning with simple goals and progressing to objectives emphasizing more independent behavior.
(3) Guide (Vision-Up) - The self-help activities are labelled as to eating, dressing, grooming, mobility and toileting. They are organized according to age levels rather than sequential growth in each area.
c. Socialization
(1) Oregon Project - The socialization skills appear to be realistic and age appropriate.
(2) Wabash Guide - There is no specific socialization skill area in this program. There are some suggestions for group play and games but no specific objectives are given.
(3) Guide (Vision-Up) - There is an adequate socialization area with specific goals but the validity of the behaviorial objectives is highly questionable. It appears many of the goals are totally unrealistic.

## d. Language

(1) Oregon Project - This section is detailed with a combination of activities to develop language concepts and activities to improve articulation developing from 0 to 6 years.
(2) Wabash Guide - There are numerous activities to develop language skills in the areas of non-verbal responses, language production, gestures and responses, and complex language concepts.
(3) Guide (Vision-Up) - Specific goals are set up to develop language under the categories of expressive language, sentence structure, spontaneous speech and speech orientation. They are organized developmentally from 0 to 6 years.
e. Cognitive
(1) Oregon Project - Cognitive goals are organized developmentally with an emphasis on developing many cognitive skills which are particular to the visually impaired child.
(2) Wabash Guide - This cognitive section of this program is broad and flexible and is based on the developmental theory of Piaget. The goals are organized within six different areas of development - (a) free play, (b) visual pursuit, (c) environmental ends, (d) causality, (e) objects in space, and (f) imitation. A wide variety of activities is given. An additional section exists in the program entitled "number concepts and skills". Rather than specific goals, this section is composed of suggestions, games, activities and techniques for teacher number concepts to children.
(3) Guide (Vision-Up) - The cognitive objectives in this program are organized into age level and activities and are specific and enacting.

## 7. Recommendations

The Oregon Project and the Guide use similar formats and are a much more structured approach than the Wabash program. They could also be implemented much easier than the Wabash materials because of this structure. The Oregon Project is more compact and thus easier to use than is the Guide. It is also less expensive and more readily obtainable. The Wabash program is more flexible in its approach and has a wider range and choice of activities. The goals are well-defined in various skills areas within a larger developmental area. While the Oregon Project and Guide categorize skills developmentally as to age levels, the Wabash program also emphasizes the sequential development of skills but without using age norms. This appears to be a more realistic and sensible approach to teaching visually impaired children who may or may not be developmentally delayed in any particular area. The Wabash program seems to consist of activities which are more typical to preschool children. It is also the least expensive of the three programs. However, it would probably require more time to plan training activities and implement them using this program. Both the other programs have a "program card" system which could be given directly to a programmer to use.

```
A. Knowledge of Self
```

BJECTIVES
TEACHING STRATEGIES

## MATERIALS

## 1. Personal Characteristics Self/Identification

The child:

Demonstrates understanding of the use of names.

States full name, age, address, and telephone number.

States names of family members.

Calls significant persons by name (family, classmates, friends).

Identifies things which he likes and does not like to do.

Identifies things which he does well.

Recognizes physical differences between adults and children.

## 2. Physical Self

Identifies the five senses and indicates the body part involved.

Discuss child's first name, classmates' first name, other names, last names.

Discuss why people have names. Label coat hooks, storage spaces, lunch kits with name tags (braille or large print).

Use role play of situations in which it is necessary to use this information, e.g. child is lost.

Encourage child to describe family members and friends by name.

Tape family members' voices, have child identify.

Observe child during free play, noting child's preferences. Discuss with child.

Reward with social praise (verbal and tactual).

See Orientation and Mobility section.

General References: Beginning with the Handicapped;
Guide (Vision-Up).

The Learning Party (record).
T.A. for Tots.

TEACHING STRATEGIES
MATERIALS

Begins to develop body image.

Recognizes that people are either male or female.

## 3. Emotional Self

Identifies specific emotions in self and others.

Recognizes the existence of a wide range of emotions and feelings.

Demonstrates understanding that feelings can be expressed in appropriate or inappropriate ways.

Use classroom observation.

When child engages in inappropriate behavior, discuss and divert attention to another activity.

See Orientation and Mobility section.

Discuss conflict/cooperative/ threatening situations as they occur.

As model, discuss own feelings as they occur.

Provide situations where children learn to recognize different sounds that indicate feelings, e.g. what is a sad/ happy sounding voice?

Practise saying nursery rhymes as if angry/sad/happy etc.

Role play situations involving emotion where gestures, facial expressions and posture are utilized.

Teach partially sighted to look directly at the person to whom they are speaking or listening.

Heather's Feathers. Free To Be You. I Like Myself. Everybody Cries Sometimes (records).

UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
Level 2
A. Knowledge of Self

TEACHING STRATEGIES
MATERIALS

The child:

Teach blind to address person spoken to by name, to look directly at the person to whom they are listening or speaking.

Demonstrates understanding that each person, at various times, will need help and be able to offer it to others.

## 2. Factors Affecting Relationships

Develops increasing awareness of people in terms of role, age groups, social groups, e.g. family, friend.

Demonstrates knowledge of own sex.
3. Handling Social Interaction
a) Expressive Communication Skills

Communicates in a variety of ways.

Encourage the child to ask for help whenever it is appropriate; test this skill by reducing assistance during an activity to see if child will spontaneously seek help.

Have class discussion on composition of each child's family and the roles of members.

Teach children to address the person spoken to by name and to look directly at or face the person they are talking to or listening to.

Role play different situations, verbal/non-verbal, using touch, gesture, facial expressions, posture. Use direct teaching.
understanding self and getting along with others
Level 2
B. Social Relationships

OBJECTIVES
TEACHING STRATEGIES
MATERIALS

Respunds appropriately to introduction of new people.

Demonstrates ability to listen attentively.
c) Problem Solving and Decision Making

Makes simple choices, e.g. which toy to play with.

Begins to participate in decision-making process.

Begins to recognize consequences of his choice.

Have children play direction games, e.g. "Simon Says".

Use role play; take field
trips into the community to meet new friends. Invite class guests.
Reinforce appropriate attention seeking behavior.

Role play introductions and requests for others to identify themselves.

Encourage children to discuss their feelings.

Use role play: answering the door, answering the telephone.

Teach children to shake hands.

Provide frequent and systematic opportunity for children to make choices.

Discuss and have child accept consequences.

Have children participate in the development of classroom rules and abide by them.

Recognizes, discusses and predicts a routine sequence of wants at home and school.

Recognizes necessity for rules in group.

Demonstrates understanding that breaking rules has consequences.

Demonstrates understanding that people need rules to organize their lives.

Demonstrates understanding that group rules may be modified, depending on the situation.

Recognizes need to follow directions of adults when travelling.

Use role play. Use cooperative play situation to discuss solutions to problems.

Provide situations where children learn to share, take turns.

See Citizenship and Individual Responsibility.

Establish daily classrọom routines; have children verbalize the sequence of activities.

Play games that enable individual children to create the rules, e.g. rules governing free time.
B. Social Relationships

| OBJECTIVES |
| :--- |
| 5. Social Roles |
| The child: |
| Identifies characteristics <br> of family roles, e.g. moth- <br> er, father, sister, brother. |

## INTRODUCTION

"Orientation and mobility is that part of education that prepares the blind child to travel independently. Orientation refers to an awareness of oneself in relation to the physical environment. It means knowing one's current location. Mobility is the ability to travel safely, comfortably, gracefully and independently. It is the ability to make easy movement. But simple, it is the ability to walk in a safe manner and know where you are going!" I
"Independent travel will ... help him become independent in his life style and capable of assuming a satisfying and useful role in life. W. Hanks Levy, a pioneer in education for the blind has said that mobility gives the blind person a power that no other skill can give. It gives him the power to dominate his environment rather than being trapped by it. It gives him the power to get up and go anywhere he wants at any time. It gives him freedom. " 2

The Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired, Illinois Office of Education, is the recommended program to be followed. It contains four inter-related sections that deal with body image, basic sensory concepts and abilities, motor coordination and sensory mobilities. Each section contains a brief introduction and definitions of specific skills to be developed; checklists in chart form suitable for individual needs, assessment and post-testing; and suggested activities, games, materials and references.

The child should begin learning these concepts as soon as possible. Many of these may be taught in the home and preschool program cooperatively. Those skills which the child has not mastered upon school entrance must continue to be a part of his regular school program. Once the child has mastered all of these concepts he is ready to begin formal orientation and mobility training with a qualified orientation and mobility instructor.

The mobility specialist has received intensive training in how to teach a blind person to travel and realizes that a little knowledge, taught poorly, can give a visually impaired student false confidence. This may result in a student getting into a dangerous situation. When a student is ready to begin specific pre-cane skills a qualified mobility specialist must be contacted at the local school board office or an Alberta Education Consultant for the Visually Impaired.

1 The Road to Freedom: A Parent's Guide to Prepare the Blind Child To Travel Independently, Webster, Richard, p. 15.

2
Op cit p. 18.

## ORIENTATION AND MOBILITY

## A. Body Image

"Body image is the recognition of the parts of the body and how they operate. It involves the ability to move efficiently through space and is based on the youngster's recognition of who he is, where he is, and what he is. This knowledge is the result of previous mental, physical and psychological experiences built upon what is heard, touched, seen and smelled. Because of his sensory loss, the visually impaired student often has difficulty integrating these stimuli and developing total concepts about his body and those of others. The following check lists, activities and materials will be useful in planning a sequential program. Space has been provided for the teacher to incorporate additional items on the check list, activities, materials and references. If the student is unable to respond appropriately to the questions asked, the teacher should develop an individualized training program. Some games and materials are listed in this section as examples of appropriate activities for the development of body image. In planning a total program the teacher can utilize these and other sources." 3

Level 2
A. The Body Image

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

Note: While the following section was developed for Level 3 students it is recommended that the Level 2 teacher introduce Orientation and Mobility with appropriate activities.

Specific checklists, activities, materials and references may be located in each section of the Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired, Illinois Office of Education.

The pages listed should be referred to for specific strategies. Some time should be spent daily working through the checklist with each child. Each concept should be taught to mastery.

The child:

Names and identifies body parts.

Identifies clothing and body parts.

Identifies clothing and accessories for body parts.

Identifies another person's, a model's or an animal's body parts.

Demonstrates ability to move body parts.

Demonstrates ability to move his own body parts to other body parts.

Demonstrates ability to move his own body parts to touch another person's body parts.
P. $13-16$
P. 17-20
P. 21-24
P. 25-30
p. $31-36$
p. $37-40$
P. $41-44$

A Curriculum Guide for the Development of Body and Sensory
Awareness in the Visually Impaired.

The Road to Freedom:
A Parent's Guide to Prepare the Blind Child to Travel Independently.

ORIENTATION AND MOBILITY
Level 2
A. The Body Image
OBJECTIVES $\quad$ TEACHING STRATEGIES $\quad$ MATERIALS

The child:
Demonstrates ability to move body and specific body parts to objects.

Demonstrates ability to move objects to specific body parts.

Names and identifies front and back of the body.

Identifies objects and/or sounds in front and in back of the body.

Demonstrates ability to place objects in front and in back of the body.

Demonstrates ability to move his body forward and backward.

Names and identifies right and left sides of the body.

Identifies objects and/or sounds to the right and to the left of the body.

Demonstrates ability to place objects to the right and to the left of the body.

Demonstrates ability to move his body to the right and to the left.
p. $45-48$
p. $49-52$
p. $53-56$
p. $57-60$
p. 61-66
p. $67-70$
p. $71-76$
p. $77-80$
p. $81-86$
p. $87-90$

The child:

Identifies right and left sides of another person's body.

Demonstrates ability to move his own body using basic concept words.

Demonstrates ability to move his own body to another person's body using basic concept words

Demonstrates ability to move body to objects using basic concept words.

Demonstrates ability to move objects to body using basic concept words.

Demonstrates ability to move objects using basic concept words.
p. $91-94$
p. $95-98$
p. $99-102$
p. 103-106
p. 107-110
p. $111-114$

## ORIENTATION AND MOBILITY

B. Basic Concepts
"Basic concepts refer to the primary impressions a youngster obtains of his environment through utilizing his senses. These concepts (size, texture, weight, etc.) become more meaningful when he has the capacity or ability of relating them to his surroundings through his identifying, describing, grouping, etc. To acquire these basic concepts the visually impaired student needs to be exposed to a variety of experiences and activities related to his home, school and community.

A basic checklist is provided at the beginning of this section to be used as a pre and post test. This will serve as a quick reference for the teacher in determining the youngster's needs. Once the needs are assessed an individualized program should be planned.

The charts provide a few examples for presenting each concept. They are meant to be a stepping stone from which you develop further activities.

Materials and references have been included for each concept with space for additional entries." 4

A Curriculum Guide for the Development of Body and Sensory Awareness in the the Visually Impaired, Illinois Office of Education, p. 118.

## OBJECTIVES

The student:

Demonstrates knowledge of the basic concept of size.

Demonstrates knowledge of the basic concept of shape.

Demonstrates knowledge of the basic concept of texture

Demonstrates knowledge of the basic concept of color.

Demonstrates knowledge of the basic concept of weight.

Demonstrates knowledge of the basic concept of location of specific items.

Demonstrates knowledge of the uses of specific items.

Demonstrates knowledge of the basic concept of position.

Demonstrates knowledge of the basic concept of movement.

Demonstrates knowledge of the basic concept of time.

Demonstrates knowledge of the basic concept of sound.

Demonstrates knowledge of the basic concept of taste.

Demonstrates knowledge of the basic concept of odor.

TEACHING STRATEGIES
p. $124-125$
p. $126-127$
p. 128-129
p. $130-131$
p. $132-133$
p. $134-135$
p. $136-137$
p. $138-139$
p. 140-141
p. 142-143
p. $144-145$
p. 146-147
p. 148-149

## MATERIALS

A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired.

## C. Motor Coordination

"Motor coordination refers to the youngster's ability to perform muscular activities with skill and balance. This section presents a variety of skills which are desirable for all youngsters to develop in order to function smoothly and efficiently throughout life. Assimilation of these movements is generally accomplished through exploration and observation during the growth and developmental process. Many visually impaired youngsters may not profit from a visual stimulus alone and may need to be "shown" the most simple body movements.

A motor coordination checklist is included as a check sheet for each student as to whether they can or cannot perform the specific skill. An individual record can be kept for pre- and post-testing.

Each skill is defined and presented with two activities plus assessment guidelines. The descriptive activity is the teacher's direct statement to the student. If the student is unable to perform the skill adequately, the teacher refers to the maneuvering activity. This activity provides basic instruction in working with the youngster.

Additional activities, materials and references are included for your information. You are encouraged to add other sources on these pages for your personal use. In working with these skills it is also suggested you consult your school district's Physical Education Curriculum Guide for further ideas." 5

5
A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired, Illinois Office of Education, p. 153.
C. Motor Coordination

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The child: |  |  |
| Demonstrates ability to lie down. <br> Demonstrates ability to roll. | p. 157-158 p. 159-160 | A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired. |
| Demonstrates ability to scoot. | p. 161-162 |  |
| Demonstrates ability to sit. | p. 163-164 |  |
| Demonstrates ability to kneel. | p. 165-166 |  |
| Demonstrates ability to crawl. | p. 167-168 |  |
| Demonstrates ability to stand. | p. 169-170 |  |
| Demonstrates ability to walk. | p. 171-172 |  |
| Demonstrates ability to march. | p. 173-174 |  |
| Demonstrates ability to jump. | p. 175-176 |  |
| Demonstrates ability to hop. | p. 177-178 |  |
| Demonstrates ability to run. | p. 179-180 |  |
| Demonstrates ability to side-step. | p. 181-182 |  |
|  | 181 |  |

C. Motor Coordination


## D. Sensory Modalities

"The success that an individual has with the orientation and mobility process is highly dependent upon that individual's perception of his environment. A visually impaired youngster must become aware of his development of his remaining senses. We can assist the youngster by teaching him how to interpret and be aware of all clues around him. If residual vision is present, all efforts should be made for effective utilization of vision in all activities. The youngster should be able to make use of sounds; recognize tactual clues and landmarks; recognize the smell of a bakery, the sound of an idling car and feel the declining sidewalks as he approaches the curb. In other words, he should be able to place all of his environment clues in proper perspective so he can become entirely familiar with his surroundings and very knowledgeable about his whereabouts.

The essential skills, relative to sensory modalities, should be placed within the context of the educational situation. This section presents many activities, materials and references to enable the teacher to do this.

An evaluation chart is included for each sensory modality to serve as a guide in pre- and post-testing. A reference outline is also incorporated at the beginning of each sense to provide guidelines in each specific area. A list of the materials in the Low Vision Kit is included in this section.

These sensory modality areas are by no means complete. The teacher is encouraged to elaborate on materials, references and activities by adding ideas to these pages." 6

6 A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired, Illinois Office of Education, p. 206.

## OBJECTIVES

1. Visual Modality

The child:
Identifies specific objects with the following variable:

- distance
- size
- illumination
- figure-ground contrast
- stationary
- moving.

2. Auditory Modality

Demrnstrates recognition of sound.

Demonstrates ability to localize sounds.

Demonstrates ability to discriminate and identify sounds.

Demonstrates ability to localize sound source in relationship to the listener.

Demonstrates ability to identify and confirm sound.

Demonstrates ability to use sensory devices.
p. 208-217

Note: A hearing assessment is necessary at the beginning of each school year to ensure that the student does not have a hearing impairment.
p. $218-231$
p. 218-231
p. 218-231
p. 218-231
p. 218-231
p. $218-231$

## MATERIALS

A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired.

The child:
Demonstrates understanding of mobility concepts.

## 3. Tactual Modality

Identifies a surface or an object through the tactual sense whether using hands and/or feet.

Demonstrates ability to make distinctions between various objects.

Demonstrates ability to confirm the object tactually.

Demonstrates ability to obtain knowledge through his senses.

## 4. Olfactory Modality

Demonstrates ability to identify various odors.

Demonstrates ability to make distinctions between various odors.

Demonstrates ability to confirm a particular odor.

Demonstrates ability to obtain knowledge of the object through his senses.
p. 218-231
p. 232-239
p. 232-239
p. 232-239
p. 232-239
p. 240-245
p. $240-245$
p. 240-245
p. $240-245$

ORIENTATION AND MOBILITY
Level 2
D. Sensory Modalities

MATERIALS

## 5. Gustatory Modality

The child:
Demonstrates ability to identify a particular product through its taste.

Demonstrates ability to make distinctions between various edibles.

Demonstrates ability to confirm particular taste.

Demonstrates ability to obtain knowledge of the edible through his senses.
p. 246-251
p. 246-251
p. 246-251
p. $246-251$

## MATERIALS

Have child experience, by use of all senses, foods in as many ways as possible: as they grow, are purchased, prepared, whole and in part, raw and cooked various ways, as planted and harvested.

Take field trips to gardens, farms, groceries and restaurants.

Provide cooking and serving experiences.

Use dramatic play in house corner or restaurant interest center, using read food items.

Have a class discussion, e.g. milk is from the dairy products group, it provides calcium for developing strong bones and teeth.

Take field trip to grocery store where emphasis can be placed on groceries being shelved via food group, e.g. fresh meat is stored together as are fresh fruits, fresh vegetables, canned goods, frozen foods.

Have child touch, prepare and taste one food in a variety of forms: raw carrot, frozen carrot, pureed carrot, carrot cookies, etc.

Cool Cooking for Kids.

Classifies familiar food into food groups.

Begins to demonstrate understanding of the value of various foods.

Demonstrates understanding that one food is available in many forms.

HEALTH
Level 2
A. Nutrition

TEACHING STRATEGIES
MATERIALS

The child:

Demonstrates knowledge that people eat some foods because they are good for them.

Demonstrates understanding that some foods should be eaten rarely because they have no nutritional value.

Take field trip to grocery store to see these items sold in various states.

Have a class discussion.
Invite dietician, nurse, dental hygienist, dentist or doctor to speak to class.

Take field trip to dietician, nurse, dental hygienist, dentist or doctor's office.
OBJECTIVES

The child:

Identifies basic body parts on self and others.

Recognizes and discusses differences between boys and girls.

## 2. Care of Body

Assumes initial responsibility for body hygiene, e.g. washes face, brushes teeth, toileting.

Seeks help appropriately
when sick or hurt.

## 3. Drugs

Takes drugs only when administered by a responsible adult.
section.

Play body part identification games, e.g. "Head, shoulders, knees and toes".

Trace child's silhouette, dress in child's own clothes.

Have child play with, change and bathe real live babies with the help and cooperation of an understanding parent. If not available, use accurate models.

Have a class discussion about reason and method of caring for own body. Provide practice, e.g. have child clean teeth after lunch. Use dramatic play.

Use role play and class discussion. Take visit to school nurse, doctor's office, hospital emergency unit.

Use class discussion and role play.

Invite class visitor or go on field trip to St. John's, V.O.N., pharmacist, stores.

See Orientation and Mobility

Hap Palmer records.

TEACHING STRATEGIES
MATERIALS

HEALTH
Preschool
C. Community Health Services

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The child: |  |  |
| Demonstrates knowledge of the existence and function of community health workers. | Have a class discussion. Go on field trips. Read stories. Invite class visitors. Use role play. |  |
| Demonstrates knowledge that community helpers are there to help us. | Have a class discussion. Go on field trips. Read stories. Invite class speakers. Use role play. |  |
| Demonstrates an understanding of places to go to for medical help. | Go on field trip to doctor's office and hospitals. Invite guest speakers, e.g. nurse, ambulance driver. |  |

The child:
Demonstrates awareness of common sources of danger within the home.

With assistance, identifies dangers associated with various areas and items in the home, e.g.

- sharp objects
- electrical outlets
- appliances
- tools, machinery
- animals
- poison, etc.

Demonstrates understanding of danger of fire in the home.

Have child tour own home; discuss and describe coping with dangers from:

- electrical outlets
- appliances
- stairs
- sharp objects
- poisons
- hot water from taps
- loose rugs
- basements
- ice and snow
- falling objects
- matches, etc.

Have child tour other homes to observe that these dangers are present there also.

See Orinetation and Mobility section.

Use guided appropriate "handson" experiences, e.g. hot water tap.

Use role play.
Have a class discussion.
Invite appropriate guest speakers.

Stories About Safety. Early Bird Series.

Alberta Safety
Council Materials.

## SAFETY

Level 2
B. In the School

The child:

Demonstrates awareness of common sources of danger within the school setting.

Have child tour own school room and the larger physical plant.

Discuss coping with dangers from various sources as listed under Safety, In the Home, plus boiler room, parking lot, etc.

See Orientation and Mobility section.
C. In the Community

The child:

Demonstrates awareness of common sources of danger within the community.

Tour selected areas of community and discuss coping with various dangers, e.g. doors-revolving, panic bar, automatic opening.

See Orientation and Mobility section.

Demonstrates knowledge of rire prevention.

Practises good fire prevention habits.

Demonstrates understanding of the meaning of fire alarms and drills.

Responds to fire alarms appropriately.

Have child warm up after sleighride or ice skating trip around a campfire.

Barbecue a favorite food.
Have children smell smoke.
Have a class discussion on warm baths, furnace in winter, etc.

Have children visit a scene of former destructive fire; see and smell charred furniture, building and grounds as safety permits.

Invite guest speaker, e.g. firefighter, medical personnel.

Have a class discussion.
Take field trip to fire hall.
Invite guest speaker,
e.g. firefighter or marshall.

Take a "Fire Safety Tour" to search for and eliminate fire hazards.

Have a class discussion about use of smoke detector.

Have child participate in fire drills and learn several routes.

Invite guest speaker, e.g. firefighter or fire marshall.

## SAFETY

Level 2
E. Traffic

## OBJECTIVES

Demonstrates understanding of the dangers of using streets and sidewalks.

Demonstrates ability to travel streets and sidewalks in safety by using own senses and utilizing responsible sighted guide as appropriate.

Demonstrates understanding that traffic is controlled by symbols accessible to the sighted and partially sighted.

Demonstrates understanding of the importance of using seat belts.

See Orientation and Mobility section.

Take field trips to use streets and sidewalks in a variety of ways, e.g. sidewalk: walk on it, run on it, ride a bike, pull sled, walk a dog; street: cross with a sighted guide, ride in a car, ride on a bus.

Have child examine road vehicles, bicycles, tricycles, kiddy cars, etc. and discuss their potential to harm people.

Provide travel practice with responsible sighted guide.

Have a class discussion.

Use appropriate "hands-on" experience with traffic signs, and models of traffic signs in the classroom.

Use appropriate "hands-on" experience in a variety of motor vehicles.

WORLD OF WORK
Level 2
A. Specific and Allied Work Skills

OBJECTIVES
TEACHING STRATEGIES
MATERIALS

## 1. Use of Tools and Equipment

The child:

Manipulates a variety of construction materials and tools, e.g. hammer, scissors, eggbeater.

Follows simple rules of organization and care of tools and materials, e.g. crayons in box, clean brushes and return to correct place.

With supervision, constructs simple projects.

Demonscrates safe use of simple tools.

## 2. Following Directions

Follows simple directions.

Responds to persons in authority.

## 3. Decision Making

Chooses between two or more alternatives.

Demonstrate correct use of tools. Have child experiment with tools.

Label storage areas.
Discuss and demonstrate cleaning and storage of tools. Post rules; appoint mónitors.

Demonstrate steps to be followed.

Assist child when necessary.

Play "Simon Says" or other games using simple directions.

Provide a variety of materials for a project; have child choose one.

Workjobs I and II. Workjobs for Parents. I.P.A. Manual, 1980.

Consumer Sequential Cards.

## 4. Independence

The child:

Demonstrates ability to behave appropriately in familiar situations, e.g. playground, school.

Have a class discussion about appropriate behaviors.

Magic Circle.
100 Ways to Enhance
the Self-Concept in
the Classroom.
OBJECTIVES $\quad$ TEACHING STRATEGIES $\quad$ MATERIALS

## 1. Why Work

The child:
Recognizes that most people work.

Demonstrates understanding that work brings income to parents.

Demonstrates understanding that doing work well brings satisfaction.
2. Jr,b Awareness

Demonstrates understanding of work done by some community workers.
3. Job Demands

Follows simple instructions.
Completes tasks as assigned.

Provide child with various classroom responsibilities on which others depend: pet or plant care, snack serving, etc.

Have a class discussion.
Use role play of various situations in which children do and do not complete tasks.
Provide child with a variety of experiences in completing tasks well.

Use class discussion and dramatic play. (o

Self Awareness/Career Awareness.
What Do People Do?

Listens attentively.

HOME MANAGEMENT
Leve1 2
A. Clothing

## OBJECTIVES

1. Care

The child:

Recognizes own clothing.

Demonstrates awareness that each person has his own clothing.

Undresses with minimal supervision or help.

Demonstrates ability to seek help if needed when dressing.

Dresses self with decreasing amount of assistance.

Fastens clothing, using snaps, buttons, zippers, buckles and laces.

Accepts some responsibility for care of clothing.

Uses hangers and storage areas.

TEACHING STRATEGIES

Label each article of clothing so that the child recognizes it as his own.

Begin with most easily removed pieces of clothing, e.g. mittens, toque, etc.

Describe clothing to child
and encourage him to experience it tactually.

Use role play.

Begin with most easily donned pieces of clothing.

Use "hands-on" experience, guiding child through step-bystep procedure, repeating as often as necessary.

Label hooks, drawers, cubby holes or lockers so the child can hang or place clothes.

Provide each child with his own storage place and train him to use it.

MATERIALS

Guide for Parents of Pre-School Visually Handicapped Children.

Wabash Guide.

The Oregon Project for Visually Impaired and Blind Preschool Children.

Pre-School Learning Activities for the Visually Impaired Child, A Guide for Parents.

## 2. Selection

Demonstrates awareness that selection of clothing is dependent on weather and season.

Demonstrates awareness of appropriateness of clothing for day and night wear.

Demonstrates awareness that men's clothes differ from women's clothes.

Selects own clothing occasionally.

## 3. Construction

Identifies and uses sewing tools.

Have child handwash doll clothes.

Have child put soiled clothes in the laundry hamper.

Provide appropriate "handson" experience with washing, drying, folding, putting away clothes.

Discuss when clothes should be washed and worn.

Teach children to ask whether clothes are clean.

Use role play.

Set up housekeeping corner with weather appropriate clothing.

Use role play and appropriate children's stories.

Set up housekeeping corner with examples of men's and women's clothes.

Elicit parental cooperation in allowing child to develop increased independence.

Have child use large blunt needles and blunt scissors in class projects.

1. Shopping

The child:
Demonstrates awareness that food can be purchased in stores.

Demonstrates awareness that. items taken from a store must be paid for.

Demonstrates awareness that like products are shelved together in a store.

## 2. Eating

Eats a wide variety of food in various states.

Names and describes a wide variety of foods.

Names utensils correctly.

With assistance, uses eating utensils.

Take field trip to various types of grocery stores to purchase snacks.

Use role play.
Set up grocery store corner.
Take field trip to grocery store to provide "hands-on" experiences.

Bring in fresh, frozen, canned and cooked food for appropriate "hands-on" experience.

Have a discussion about identifying characteristics, e.g. color, taste, odor, texture, sound.

Use descriptive words such as rough, smooth, sticky, dry, etc. in relationship to different food presented.

Have a tea party; provide a "mystery box".

Provide child with appropriate snacks to teach progressively more sophisticated skills, e.g. custard, soup, pancakes, peas.

Canada Food Guide. Department of Agriculture Materials.

Materials for grocery store corner.

What's Cooking?

The child:

Demonstrates ability to locate food on plate.

Demonstrates courtesy to others while eating.

Demonstrates awareness of appropriate ways to eat various foods.

Demonstrates ability to describe food changes through freezing, cooking, canning.

## 3. Preparation

Demonstrates some understanding of measuring, counting, etc.

Recognizes basic kitchen tools and appliances and their uses.

Demonstrates knowledge of basic steps in preparing foods.

TEACHING STRATEGIES

Teach clock method.

Role play dining situation.
Go on field trip to restaurant.

Go on field trip to pizza place, hamburger outlet, soup, sandwich and salad bar, Chinese restaurant.

Use appropriate classroom activities.

Provide classroom experience with a wide variety of subjects to be counted, measured, used in one-to-one correspondence, e.g. buttons, rocks, cup, spoon.

Provide opportunity to play with water and kitchen tools in sink or water tray.

Have child use toaster, eggbeater.

Have child prepare a variety of simple foods with appropriate assistance, e.g. peeling, cutting, cooking carrots.

MATERIALS

Kids in the Kitchen. The Kids' Cookbook.

HOME MANAGEMENT
Level 2
B. Food

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| 4. Serving |  |  |

## 5. Preserving

Demonstrates understanding that refrigeration and freezers are used to preserve food.

Demonstrates understanding that food must be handled with cars and cleanliness.

Demonstrates understanding of appropriate storage of food, e.g. cans in cupboard, fresh produce in refrigerator, frozen food in the freezer.

## 6. Production

Demonstrates knowledge that foods come from various sources.

Demonstrates awareness of the growth of plants and animals.

Teach child to fold napkin, place and count utensils, return soiled dishes to sink, push food scraps into garbage can.

Bring food to classroom, e.g. cottage cheese, that should be refrigerated, and allow to spoil. Examine daily.

Discuss importance of cleanliness associated with food.

Go on field trip to purchase a variety of food which will then be stored appropriately at the school.

Take field trips to gardens, farms, dairies, poultry farms, lakes.

Have child plant, tend and Kids' Garden Book. harvest a small garden, go fishing, gather eggs.

Have child plant garden, care for pet in class.
C. Maintaining the Home

## OBJECTIVES

1. Selection

The child:
Recognizes similaries and differences between his home and the homes of others.

Demonstrates awareness of the specific uses of rooms within home, e.g. kitchen.

Demonstrates awareness of the variety of materials used to construct a home.

## 2. Furniture and Furnishing

Demonstrates ability to name and describe use of common home furniture and appliances.

Demonstrates knowledge of where furniture and appliances belong in a house.

## 3. Care and Maintanance

Demonstrates ability to tidy his own area at home and at school.

Demonstrates ability to perform simple household tasks.

Assists in care of pets and plants.

TEACHING STRATEGIES

Take field trips to apartment, trailer, duplex, etc.

Have a class discussion.
Have class list: "What do I do in the kitchen? What do I do in the living room?"

Take field trips to find lumber, electrical wire, plaster board, glass.

Have materials available for play in the classroom.

Set up dollhouse, activity centre, housekeeping corner.

Take field trip to furniture store, show homes.

Establish classroom routine to encourage responsibilities, e.g. clean-up time.

Set up housekeeping corner.
Have child clean-up after snacks.

Provide ongoing responsibilities in class.

MATERIALS

Housekeeping corner materials.

## A. Earning Money

The child:
Identifies money by touch.

Discriminates between coins and bills.

Demonstrates understanding that coins and bills are both money.

Begins to identify various coins by touch.

Demonstrates understanding that sometimes money is earned for completion of a job.

Play sorting games. Have child differentiate real money from other objects, e.g. corks, button, pebbles, envelopes.

Provide tray with real coins and bills for the child to sort.

Go on field trips to store where a familiar item is purchased several times using various pieces of money.

Go on field trips where child sees cash register, examines coins and bills, sees customers pay for goods and services, assists casher by collecting money and handling change to several customers with small orders to process.

Play sorting games. Use real coins, beginning with only dimes and quarters.

Have child sort coins for play store or find all of the quarters so that items can be bought.

Pay child small sums for completing appropriate tasks.

Take field trips to observe a variety of working environments, including those similiar to that of child's parent, where child will work along with an employee.

Materials from Dept. of Consumer Affairs.

Real coins.

Demonstrates understanding that some things cost more than others.

Accompanies adult on shopping expeditions.

## C. Saving and Borrowing

Demonstrates initial understanding that money can be saved and used at a later date.

Go to various stores where child selects an item, pays for it and carries it out.

Use dramatic play. Have child use real coins to "buy" real items in classroom store as an extension of field trips

Have child pay his own bills and admission on field tri.ps and receive change from transactions.

Take field trips to stores where child buys two or three items of different price.

Have children do small chores for people whom they know, e.g. janitor, school secretary, principal.

Hold coins received and help children plan what to do with them. First plan to spend after nap, tomorrow, then next week. Save money for very short time initially.

Have child use piggy bank.

Piggy bank.

Note: Level 2 skills in this area are found in the Orientation and Mobility section.

## Swimming

Demonstrates understanding that water is potentially useful and/or dangerous.

Participates in water activities.

TEACHING STRATEGIES

Have child sit very quietly and listen for different noises.

Record sounds from around the school and have child guess what they are.

Go on neighborhood walks, listen for and identify sounds (bus, children, animals).

Take field trip to farm.
Have child identify sounds in home.

Have child repeat simple rhythms clapped by teacher.

Have child identify sounds which are similar, e.g. high/ low notes on piano; loud/soft voices.

Expose child to various types of music.

Teach child simple songs and rhythms and have him repeat them.

Have child manipulate different instruments.

## MATERIALS

Sounds Around the Home, (Sounds I Can Hear Part 15).

Sounds I Can Hear
(Four Volume Set).

Introduction to Musical Instruments.
If Snowflakes Fell
in Flowers (Hap Palmer record).
2. Rhythm Playing

The child:
Participates in rhythm band activities.

Demonstrates knowledge of rhythm in his playing (fast, slow, loud, quiet, etc.)

Demonstrates ability to keep time to music.

Provide opportunity for child to manipulate a variety of rhythm instruments.

Give examples of each and have child copy.

Use clapping activities.

Creative Movement for the Developing Child: A Nursery School Handbook for Non-Musicians (Second Edition).

Clap, Snap and Tap Band; Homemade Band (Hap Palmer record). Play and Learn.
B. Art

## INTRODUCTION

"A blind student can learn basic art concepts and create art projects in the same manner as a sighted child. His blindness does not make it impossible for him to learn the ideas of art or to participate in art activities.

The basic goals of teaching art to a blind child are the same as for a sighted child: to improve the child's ability to handle basic materials, such as scissors, glue, paper, and crayon; to develop an understanding of the elements and principles of design, to teach him the basic vocabulary of art; to make him aware that there are various ways to approach an art project; and to stimulate him to think creatively.

The following suggestions should be incorporated by the art teacher to assist her in successfully integrating the visually impaired student into her classroom:
"Blind children need to know where their materials are. Prepare a tray or box for each blind child with all the necessary materials before each activity.

A sighted partner is of great assistance to the blind child who may not yet have developed the skills of cutting, knot tying, pasting or taping. The sighted partner is also essential for providing feedback to the blind child. For example, in the tie dyeing activity the sighted partner describes the designs made by the dyes.

Blind children may need a little extra time to complete the art activity.
Blind children "see" with their fingers. Provide dampened paper towels for the child when an activity involves paste, clay, plaster, or papier mache. Sticky fingers find it hard to manipulate materials.

Blind children must be warned not to touch their brailled watches unless their hands are clean.

Blind children should be involved in all demonstrations.
Brailled instruction sheets should be prepared for blind children listing steps of new techniques such as printing, papier mache, weaving.

Blind children should have access to models and objects used in the science activity during the art session. For example, the blind child needs to have contact with a model of the fish while creating a plaster fish, or models of the stages of life cycles when asked to create clay expressions of the life cycle.

A screen board can be used by blind children to create linear designs. The screen board is simply a wooden frame with screening attached tautly and securely over the open area. By placing a piece of paper over the screen and rubbing it with a crayon, a textured crayon design results.

The art work produced by blind children reflects very personal expression of a mental image not influenced by vision of the art work of other children. Encourage this personal expression. It is art in its purest form. " 2

Article: "Teaching Art to the Blind Child Integrated with Sighted Children", by Collien Freund. The New OUtlook, p. 205.

Laboratory Science and Art for Blind, Deaf and Emotionally Disturbed Children, A Mainstreaming Approach, Doris E. Hadary, Ph.D., and Susan Hadary Cohen, M.A., University Park Press, Baltimore, Maryland, 1978.

## OBJECTIVES

TEACHING STRATEGIES

1. Cutting, Tearing, Fastening

## The child:

Tears, cuts and pastes a variety of materials of various textures.

Uses tape to fasten materials.
2. Drawing and Painting

Finger paints.

Paints directly with large brush on large paper.

## 3. Modelling

Creates forms in wet and dry sand.

Manipulates a variety of media.

Before using double-handed scissors, have child place his hand over adult's hand as the adult cuts papers, then use double-handed scissors. Use a guide of two lines of dried glue for totally blind children.

Use textured paints, glue, sand, raised surfaces, screen, board.

Have child make straight and curved lines with fingers, arms, and body movements.

Note: Children may require a boundary made by gluing yarn or placing a small ridge of white glue around a shape. The child should feel the entire bounds before starting.

Have child use own body (creative movement) and objects in immediate environment (sticks) to create forms.

Assist (manipulate) the child in poking, punching, pounding the clay.

## MATERIALS

Wallpaper, theatre gel, manilla tag, bristol board.
Creative Art for the Developing Child, A Teacher's Handbook for Early Childhood Education.

I Can Make A Rainbow.

Plaster of Paris mold.

OBJECTIVES |  | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

The child:

## 4. Print Making

Demonstrates ability to print with familiar objects and textured tempera to create design on paper.

## 5. Weaving and Stitching

Creates simple needlework and art.

Provide examples and/or direction (hand over hand manipulation) on ways to handle the clay, to create different shapes.

Provide examples of simple forms which the child could copy or adapt.

Assist the child in creating some useful objects that can later be used, e.g. candy dish.

Note: Some children may require the clay to be prepared by the addition of another substance to the clay, e.g. sand, water.

Choose interestingly textured objects familiar to children, e.g. sponge.

Use textured paints and varied surfaces (smooth, textures, soft, hard).

Initially provide objects with large holes so that child can easily remove objects from the string (use stiffened string).

Provide hand over hand manipulation if necessary.

Use rug mesh, large blunt needles and thick yarn.

OBJECTIVES

The child:

Participates in dramatic play.

Demonstrates personal expression through a variety of body movements.

Expresses a variety of emotions using a variety of words, intonations, and body movements.

## TEACHING STRATEGIES

Create opportunities for informal role play. Have child direct and participate in dramatic play.

Use real objects to initiate activities.

Use music to motivate creative movement.

Use role play.

See Understanding Self and Getting Along With Others,
A. Knowledge of Self,
3. Emotional Self.

## MATERIALS

Movement Without Sight.
T.A. for Tots.

Fingerplay Vol. I and II. Play and Learn.
Creative Movement for the Developing Child: A Nursery School Handbook for NonMusicians (second edition).


Participates in family conversations, sharing own activities, ideas and feelings, and listening to others.

Begins to assume responsibility for self-care.

Demonstrates the ability to respect and care for personal property, and that of other family members.

Use class discussion, e.g. "This is your grandmother, you are the grandson".

Use role playing of a crosssection of family constellations, e.g. nuclear family, single parent, two working parents, extended family unit.

Use appropriate stories.

Invite guest speakers, e.g. parents, and discuss relationships of family members.

See Understanding Self and Getting Along With Others.

Have child participate in storytelling, from made-up storybooks featuring relationships.

Have family members share their activities, ideas and feelings with the child, using appropriate language.

See Health, B. Personal Care.
Use reverse chaining.
Use class discussion.
Have child play with broken/ unbroken tap, etc.

Provide practise in using things appropriately and putting them away correctly.

Snowy Day.

Red Riding Hood. Three Bears.

Free To Be You and Me (record).

Demonstrates awareness that families change over time.

Give child routine responsibility to perform a task for the family. Select a task within his capabilities so that he can be required to complete it responsibly.

Use class discussion of responsibilities which each family member assumes.

Have child watch each family member perform his task with appropriate "hands-on" experience.

Use class discussion of privileges and pleasures of family life.

Use class discussion on birth, death, moving, separation, aging, health problems.

Have child examine childhood clothing, pictures, old household objects and compare with those presently used.

Go on field trips, e.g. to museum, Senior Citizens Home, vacant house.

Invite guest speaker: senior citizen.

Family albums.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

The child:
Identifies classmates and staff members by name.

Engages in solitary play with increasing purpose.

Engages in parallel play.

Participates in conversations, demonstrating ability to listen and respond.

Always address student by name.

Provide a variety of interest centers where carefully chosen equipment and materials are made available to the child.

Provide child with repeated assistance in using materials until child is familiar and comfortable with their use.

See Understanding Self and Getting Along With Others.

Note: Because visually impaired children experience a great deal of difficulty engaging in various play activities, staff members should engage in parallel play beside the child giving a verbal description of what the child is doing and of their own actions, to encourage the child's awareness and interest.

Provide a variety of interest centres.

Talk to the child about other children playing in the area and what they are doing.

Speak to child within one-toone and group settings.

The child:

Demonstrates ability to care for personal property and the property of others.

Engages in cooperative play.

Identifies some rules.

Accepts some responsibility for own behavior.

TEACHING STRATEGIES

Provide continuous guided explorations of the world in the classroom and beyond.

Initiate conversation according to child's level of experience.

Use class discussion.

Have child actively participate in class clean-ups on a regular basis.

Encourage, explain and facilitate cooperative play.

Initially have the visually impaired child and the teacher play; then the visually impaired child, and a selected child play with the teacher physically guiding the visually impaired child through the cooperative play. Ultimately, have the visually impaired child choose playmate to engage in cooperative play.

Use class discussion.
Begin to teach evaluation techniques, e.g. consequences.

Chart positive behaviors on graph paper - braille for blind.

Responds to authority in
the classroom and school.
C. In the Community

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :---: | :---: |

Identifies facilities available in a community and demonstrates understanding of the role of each facility.

Demonstrates understanding that individuals have various roles and responsibilities within the community.

Demonstrates understanding that community members with various responsibilities have areas of authority.

Demonstrates ability to name his community.

Go on field trips; have a discussion, e.g. how many houses, blocks.

Bring in guest speakers:
members of the community.
Have a class discussion.
Go on field trips.
Invite guest speakers.
Go on field trips where children observe carefully selected and prepared workers.

Provide "hands-on" experience and have child assist the individuals in doing their work.

Have a class discussion.
Go on field trips, e.g. to police station, fire hall, hospital.

Use rote learning.

## 1. Ecology

The child:

Distinguishes between living and non-living things.

Explains the difference between a member of the plant and of the animal kingdom.

Identifies characteristics which are shared by other living things and himself, e.g. need for food, water, air, and warmth; similar body parts.

Demonstrates understanding that animals have feelings by handling or caring for them with empathy and consideration.

Begins to assume responsibility for the care of living organism.

Take the children on a walk around the school yard, stopping occasionally to touch either a plant or an insect or a stone etc. If you touch a living thing, have the children jump up and down; if you touch a nonliving thing, have children play "dead" for a moment or so, then the life-walk continues.

Keep some living things of I.P.A. Manual (1980).

Bring a dog, cat, rabbit, etc. into the classroom and by example and instruction convey the importance of proper handling. Allow children to pet or hold the animal to demonstrate an understanding of this concept.
2. Natural Phenomena

The child:
Describes weather from outdoor conditions.

Identifies some characteristics of each season.
3. Energy

Identifies some sources of heat and light.

## 4. Pollution

Demonstrates respect for the environment when travelling through it.

Demonstrates awareness that litter makes an unsightly mess and is difficult to clean up.

Recognizes clean air/water is necessary for good health.

Make an automible litter bag from a coat hanger and a plastic bag. Use this opportunity to stress the danger of plastic bags.

Take the children onto the school grounds and have them pick up litter with sighted partner. Have them use their litter bags on this exercise. Stress the fact that they are doing other people a service.

Discuss the activities of man that can make the air "dirty"

Collect and discuss pictures or slides that illustrate this concept. Give explicit descriptions. Play the "clean-dirty" game in which a picture of a factory belching out pollutants will get a groan from the class while a shot of a pristine meadow will get applause.
E. Environmental Education

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

Identifies several jobs and worlers who help to keep the environment a better place, e.g. groundskeepers, street-cleaners.

Demonstrate the concept that water may be polluted or contain harmful substances and yet LOOK CLEAN. Mix salt into one glass and compare it to a glass of clean water; they look the same but certainly are not. Give explicit descriptions.

Discuss the nearby lake or river and the part it plays in getting rid of waste products from our homes and factories. "Where does the dirt run-off water from rain storms go?" Emphasize this water cannot be consumed.

Use the opportunity of actually encountering these workers in the performance of their tasks. When the school yard grass is being cut, take the children out to observe the job being done.

Invite the school custodian to come and show the children some of his tools and talk to them about his duties.

Have the chlidren discuss ways that they can help these workers, e.g. use the classroom wastebasket, avoid breaking branches off trees and hedges.
E. Environmental Education

## 5. Conservation

Demonstrates some understanding of the recycling concept.

Demonstrates responsibility for keeping immediate environment clean and free from refuse.

## 6. Safety

Demonstrates knowledge of the safety rules that apply to the outdoors and field study trips.

Take a field trip to a farm to provide many interesting discussions and motivate children to further understanding of the world of work.

Take field trips to a variety of jobs.

Show examples of recycled products.

Make "creations" from litter, e.g. collages.

Have children participate in Arbor Day activities to assist in developing an appreciation for plants in the "Web of Life". Provide a similar opportunity during spring clean-up to reinforce the concern for our environment at this level.

Give child the job of classroom caretaker for a day. Have the class "caretaker" pick up letter and generally tidy up the classroom.

Teach recognition of signals, e.g. one whistle means "FREEZE", two whistles mean "COME HERE".

Practise this "drill" on the school grounds or in the gym BEFORE going on any field trips.
OBJECTIVES
The child:
Demonstrates knowledge of
the dangers inherent in
everyday outdoor tools and
chemicals.

> Establish a "buddy system".
> Discuss and demonstrate the right procedures should a child become separated or lost.
> Have a senior class prepare a short skit about a lost child who follows the correct procedures when he is lost on a family picnic.

Show the class "grown-up" tools that they are not allowed to use. Explain why these are not to be used by children.

Explain and give examples of dangerous chemicals and talk about the importance of having a parent or other adult apply or use such things as sprays, fuels, knives and axes.

See Safety, Water.
Invite guest speaker: Red
Cross Instructor.
Posters and pamphlets from Red Cross.

Demonstrates awareness of the danger inherent in fire and the effect that it can have on the environment.

Recognizes various unsafe outdoor practices, e.g. drinking water from unsafe sources, eating snow, eating wild berries, mushrooms.

Melt a glass of dirty snow in the classroom to show why one should not drink it. Provide verbal description for blind students.

Collect and show some of the most common berries that the children might encounter and which they must avoid, e.g. dogwood, cottoneaster, honeysuckle. Stress no berries, etc. should be eaten unless given by a responsible adult.
understanding self and getting along with others
Level 3
A. Knowledge of Self

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

1. Personal Characteris-tics/SelfIdentification

The student:
States/writes/brailles: name, age, address, telephone number.

States name of school, names of family members.

Identifies self in photographs, family merabers by sight or in photo (partially sighted), boys and girls by names, property by appropriate print/ brailled labels.

Identifies some areas of strength (things he can do well) and some areas of interest.

Recognizes differing physical abilities between peers.

Use oral instruction and reinforcement.

Place printed or brailled names on desk/belongings; have class directory, student I.D. cards; make figure outline of child with information below.

Send home information sheet about student. List this information in a student book.

Use large print for partially sighted; T.V. reader, printed materials, appropriate "hands-on" experiences.

Discuss similarities and differences, size, shape, weight, concepts.

Provide auditory discrimination awareness training.

Use discussion, show and tell, one-to-one talk.

Provide positive reinforcement; use role playing, puppetry for the partially sighted.

Hold classroom meetings.

## All About Me.

Getting to Know Myself (record and tape).

Braille Dymo Labeller.

Magic Circle.
D.U.S.O.

Schools Without Failure.

## 2. Physical Self

The student:

Identifies the five senses and indicates body part involved.

Play "Simon Says", circle games; use tapes to teach sounds; mystery box.

Hap Palmer Records.
Smelly felts; textured materials.
Touch and Tell Books. Peabody Language
Development Kit.
Listen and Think,
Level B.
Move It.
Project Vision-Up:
Physical Development,
Self Help Skill
Development.
The Visually Handicapped Child in the Classroom.
The Body Image of Blind Children.

Have students note differences in hair, fingers, toes, arms, legs, hands, feet, voices, etc.

Have students practise use of body joints.

Concept Development for Visually Handicapped Children.

TEACHING STRATEGIES
MATERIALS

Demonstrates understanding of own sexuality.

## 3. Emotional Self

Identifies specific emotions in self and others from facial expression, posture, verbalizations.

Identiiies emotions from a variety of stimuli (pictures, stories, pantomime).

Recognizes that people can make one another happy or sad by things they say or do.

Indicates when he is feeling uncomfortable.

Demonstrates ability to relax.

Use graduated series of human forms, e.g. dolls of varying height, weight. Have student measure height and weight.

Project Waverley:
Social Studies, Unit 1, All About Me.

Use role playing; use television as a listening/
teaching device.
Discuss emotion in human interaction, e.g. feeling happy, sad, angry, fearful, left out, and expressions, etc. involved.

Use pictures which have clear, uncluttered background.

Use role play.

Use stories about human situations, role playing, openended stories.

Introduce students to relaxation techniques, e.g. yoga;
have a quiet time with music.
Use discussion, open-ended stories.

Use filmstrips and taperecorded materials for role playing.

Getting to Know
Myself (record).
Schools Without Failure.
D.U.S.O. Level 1. Love Is A Special Way of Feeling.

Magic Circle.

How Do You Feel?
A. Knowledge of Self
OBJECTIVES

The student:

Responds appropriately to feelings.

Begins to control emotional reaction to stressful situations (criticism and blame, friendly teasing).

TEACHING STRATEGIES

Use open-ended stories and ask, "How do you feel?, What would you do?" Use stories about human situations.

Teach student to recognize different sounds that indicate different feelings, e.g. a happy sounding voice, a sad sounding voice, an angry sounding voice.

Have student practise saying nursery rhymes as if angry/ sad/happy, etc.

Role play situations involving emotions, e.g. frown: eyebrows go down.

Fun Task Cards.
understanding self and getting along with others
Level 3
B. Social Relationships

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

## 1. Needs and Motivations

The student:
Demonstrates understanding that food, shelter and clothing are basic needs.

Identifies those who provide these basic needs for him.

Identifies situations in which people need help or protection, (ill, hurt, lost) in real or fantasy situations.

Identifies sources of help for specific problem situations (cut finger, lost mitten).

## 2. Factors Affecting Relationships

Categorizes familiar and unfamiliar people in terms of age, role (youngest, oldest).

Categorizes people in terms of familiarity (family, friend, acquaintances, teachers).

Have a discussion about stories read.

Have ongoing class discussion of family interactions, and family responsibilities.

Discuss role of school nurse, the police, firefighter, doctor, dentist, etc.

Discuss classroom storịes.
Use role playing situations, e.g. learning how to ask for help.

Discuss student's position in the family, e.g. younger, older members.

Discuss family, friends, and unknown people in the environment.

Provide authority training; use school visitors and students from other classes as models of "strangers".

All About Me.

Project Waverley
Social Studies
Curriculum, Year I, Unit III: What Is
A Family?
D.U.S.O., Level 1.

Magic Circle. Schools Without Failure.

## OBJECTIVES

The student:

Distinguishes girls from boys in a variety of ways (name, appearance, voice for blind, pictures for partially sighted.
3. Handling Social Interaction
a) Expressive Communication Skills

Communicates in a number of ways (gestures, speaking, writing, facial expressions for the visually impaired).

Seeks attention appropriately.

Obtains information from others by asking appropriate questions.

Responds to the questions of others, gives information when asked.

TEACHING STRATEGIES

Use class discussion: boys' names versus girls' names.

Use stories for incidental teaching.

Use appropriate pictures for visually impaired under T.V. reader.

Reinforce with classroom game.

Have "Show and Tell" during morning exercises.

In classroom meetings teach student to look in the direction of the teacher.

Teach rules for polite behavior.

Use role playing and imaginary situations to teach student how to ask for help when needed.

## MATERIALS

For Partially Sighted: Peabody Language Development Kit.
understanding self and getting along with others
Level 3
B. Social Relationships

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :---: | :---: |

The student:
Communicates with others in socially acceptable ways (taking turns, getting attention before speaking).

Demonstrates ability to introduce himself to an individual or a group.

Communicates basic feelings to others (happy, sad, hurt).
b) Receptive Communication Skills

Follows oral directions.

Demonstrates listening and attending behaviors.

Recognizes when another person is attending/ listening.

Use discussion.
Monitor classroom and playground interaction.

Use role playing.

Use role playing "Let's pretend", listening to and imitating adults, answering the door, answering the phone.

Teach student to shake hands.
Use modeling, role playing, and actual practice, to teach student how to verbalize emotion.

Play "Simon Says".

Teach partially sighted to look directly at the person they're talking to, or listening to.

Teach blind to address person spoken to by name, to look directly at the person to whom they are talking or listening.

Use classroom circle discussions.
D.U.S.O., Level 1:

Rules for discussion. Magic Circle.
Schools Without Failure.
Girls' and Boys'
Book of Etiquette.

## Instructional

Programming for the Handicapped Student.
Child Behavior and
Development.
Social Competency.

Peabody Language Development Kit.
c) Problem Solving and Decision Making

The student:

Practises making personal decisions in the classroom.

Participates in decision making process.

Recognizes possible consequences of decisions.

Identifies a problem situation and suggest a possible solution.

Participates in appropriate conflict management strategies: taking turns, apologizing, soliciting, intervention, sharing.

## 4. Rules and Routines

States the behavior expected (sharing, consideration, respect, cooperation, good manners) when given a situation at home or school.

Provide frequent and systematic opportunity for students to make choices and learn to accept consequences.

Use games, craft activities, role playing.

Ask "What would happen
if ...,", "What could happen?".

Use role playing.

Provide alternate endings for well known stories.

See Citizenship and Individual Responsibility.

Use classroom discussion, role playing, show and tell.

Discuss classroom rules, why we have to have rules.

Have a "Happy Face" and good citizen chart.

## MATERIALS

Values Clarification. Teacher Effectiveness Training.

Values Clarification. Teaching Social Behaviors to Young Children.
understanding self and getting along with others
Level 3
B. Social Relationships

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

The student:
Demonstrates appropriate adherence to simple rules in the classroom and on the playground.

Identifies and accepts consequences of breaking class rules.

Identifies rules which cannot be changed and routines which can be modified.

Demonstrates understanding that routines and rules made by the group may be modified, depending on the situation, e.g. rules for games.

Recognizes need to follow directions of adults when travelling.

## 5. Social Roles

Identifies roles associated with the family and lists some characteristics of these roles (mother, father, sister, grandmother).

Identifies leaders within the classroom or playground.

Recognizes the authority and responsibilities associated with some adult roles.

Provide positive reinforcement for appropriate behavior.

Discuss school rules, classroom rules and the need to have them.

Use games that enable individual children to create the rules, e.g. rules governing free time.

Have a discussion of a variety of family groupings, e.g. single parent, families in which both parents work, extended family.

Project Waverley Social Development and Living Skills Unit III: What Is A Family?
B. Social Relationships

The student:
Identifies multiple role of familiar adults, e.g. father is also an employee.
6. Values and Social Expectations

Demonstrates understanding that appropriate behaviors vary according to situations.

Identifies differences in cultures, e.g. costume, food, language.

Recognizes basic values, e.g. honesty, kindness.

Recognizes need for social rules.

States simple rules and recognizes when they are broken (golden rule, school or class rules, rules for games).

Have student learn about other student's holidays, foods, customs, through music stories, cooking, crafts.

Use role playing.

See Section 4, Rules and Routines.

## ORIENTATION AND MOBILITY

## INTRODUCTION

"Orientation and mobility is that part of education that prepares the blind child to travel independently. Orientation refers to an awareness of oneself in relation to the physical environment. It means knowing one's current location. Mobility is the ability to travel safely, comfortably, gracefully and independently. It is the ability to make easy movement. But simple, it is the ability to walk in a safe manner and know where you are going!" 1
"Independent travel will ... help him become independent in his life style and capable of assuming a satisfying and useful role in life. W. Hanks Levy, a pioneer in education for the blind has said that mobility gives the blind person a power that no other skill can give. It gives him the power to dominate his environment rather than being trapped by it. It gives him the power to get up and go anywhere he wants at any time. It gives him freedom. " 2

The Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired, Illinois Office of Education, is the recommended program to be followed. It contains four inter-related sections that deal with body image, basic sensory concepts and abilities, motor coordination and sensory mobilities. Each section contains a brief introduction and definitions of specific skills to be developed; checklists in chart form suitable for individual needs, assessment and post-testing; and suggested activities, games, materials and references.

The child should begin learning these concepts as soon as possible. Many of these may $r e$ taught in the home and preschool program cooperatively. Those skills which the child has not mastered upon school entrance must continue to be a part of his regular school program. Once the child has mastered all of these concepts he is ready to begin formal orientation and mobility training with a qualified orientation and mobility instructor.

The mobility specialist has received intensive training in how to teach a blind person to travel and realizes that a little knowledge, taught poorly, can give a visually impaired student false confidence. This may result in a student getting into a dangerous situation. When a student is ready to begin specific pre-cane skills a qualified mobility specialist must be contacted at the local school board office or an Alberta Education Consultant for the Visually Impaired.

1 The Road to Freedom: A Parent's Guide to Prepare the Blind Child To Travel Independently, Webster, Richard, p. 15.

2
Op cit p. 18.

## A. Body Image

"Body image is the recognition of the parts of the body and how they operate. It involves the ability to move efficiently through space and is based on the youngster's recognition of who he is, where he is, and what he is. This knowledge is the result of previous mental, physical and psychological experiences built upon what is heard, touched, seen and smelled. Because of his sensory loss, the visually impaired student often has difficulty integrating these stimuli and developing total concepts about his body and those of others. The following checklists, activities and materials will be useful in planning a sequential program. Space has been provided for the teacher to incorporate additional items on the checklist, activities, materials and references. If the student is unable to respond appropriately to the questions asked, the teacher should develop an individualized training program. Some games and materials are listed in this section as examples of appropriate activities for the development of body image. In planning a total program the teacher can utilize these and other sources." 3

Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired, Illinois Office of Education, p. 11.

Note: Specific checklists, activities, materials and references may be located in each section of the Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired, Illinois Office of Education.

The pages as listed should be referred to for specific strategies. Some time should be spent daily working through the checklist with each student. Each concept should be taught to mastery.

The student:
Names and identifies body parts.

Identifies clothing and body parts.

Identifies cloting and accessories for body parts.

Identifies another person's, a model's or an animal's body parts.

Demonstrates ability to move body parts.

Demonstrates ability to move his own body parts to other body parts.

Demonstrates ability to move his own body parts to touch another person's body parts.

Demonstrates ability to move body and specific body parts to objects.
p. 13-16
p. 17-20
p. 21 - 24
p. $25-30$
p. $31-36$
p. $37-40$
p. $41-44$
p. $45-48$

A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired.

The Road to Freedom: A Parent's Guide to Prepare the Blind Child to Travel Independently.

The student:

Demonstrates ability to move objects to specific body parts.

Names and identifies front and back of the body.

Identifies objects and/or sounds in front and in back of the body.

Demonstrates ability to place objects in front and in back of the body.

Demonstrates ability to move his body forward and backward.

Names and identifies right and left sides of the body.

Identifies objects and/or sounds to the right and to the left of the body.

Demonstrates ability to place objects to the right and to the left of the body.

Demonstrates ability to move his body to the right and to the left.

Identifies right and left sides of another person's body.

Demonstrates ability to move his own body using basic concept words.
p. $53-56$
p. $57-60$
p. $61-66$
p. 67-70
p. 71 - 76
p. $77-80$
p. $81-86$
p. $87-90$
p. 91 - 94
p. $95-98$

ORIENTATION AND MOBILITY
Level 3
A. The Body Image

The student:
Demonstrates ability to move his own body to another person's body using basic concept words.

Demonstrates ability to move body to objects using basic conceptwords.

Demonstrates ability to move objects to body using basic concept words.

Demonstrates ability to move objects using basic concept words.
p. $99-102$
p. 103-106
p. $107-110$
p. 111-114

## B. Basic Concepts

"Basic concepts refer to the primary impressions a youngster obtains of his environment through utilizing his senses. These concepts (size, texture, weight, etc.) become more meaningful when he has the capacity or ability of relating them to his surroundings through his identifying, describing, grouping, etc. To acquire these basic concepts the visually impaired student needs to be exposed to a variety of experiences and activities related to his home, school and community.

A basic checklist is provided at the beginning of this section to be used as a pre- and post-test. This will serve as a quick reference for the teacher in determining the youngster's needs. Once the needs are assessed an individualized program should be planned.

The charts provide a few examples for presenting each concept. They are meant to be a stepping stone from which you develop further activities.

Materials and references have been included for each concept with space for additional entries." 4

4
A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired, Illinois Office of Education, p. 118.

OBJECTIVES

The student:
Demonstrates knowledge of the basic concept of size.

Demonstrates knowledge of the basic concept of shape.

Demonstrates knowledge of the basic concept of texture

Demonstrates knowledge of the basic concept of color.

Demonstrates knowledge of the basic concept of weight.

Demonstrates knowledge of the basic concept of location of specific items.

Demonstrates knowledge of the uies of specific items.

Demonstrates knowledge of the basic concept of position.

Demonstrates knowledge of the basic concept of movement.

Demonstrates knowledge of the basic concept of time.

Demonstrates knowledge of the basic concept of sound.

Demonstrates knowledge of the basic concept of taste.

Demonstrates knowledge of the basic concept of odor.
p. $124-125$
p. 126-127
p. 128-129
p. $130-131$
p. 132-133
p. 134-135
p. 136-137
p. 138-139
p. $140-141$
p. 142 - 143
p. $144-145$
p. $146-147$
p. $148-149$

## MATERIALS

A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired.

## ORIENTATION AND MOBILITY

## C. Motor Coordination

"Motor coordination refers to the youngster's ability to perform muscular activities with skill and balance. This section presents a variety of skills which are desirable for all youngsters to develop in order to function smoothly and efficiently throughout life. Assimilation of these movements is generally accomplished through exploration and observation during the growth and developmental process. Many visually impaired youngsters may not profit from a visual stimulus alone and may need to be "shown" the most simple body movements.

A motor coordination checklist is included as a check sheet for each student as to whether they can or cannot perform the specific skill. An individual record can be kept for pre- and post-testing.

Each skill is defined and presented with two activities plus assessment guidelines. The descriptive activity is the teacher's direct statement to the student. If the student is unable to perform the skill adequately, the teacher refers to the maneuvering activity. This activity provides basic instruction in working with the youngster.

Additional activities, materials and references are included for your information. You are encouraged to add other sources on these pages for your personal use. In working with these skills it is also suggested you consult your school district's Physical Education Curriculum Guide for further ideas." 5

5 A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired, Illinois Office of Education, p. 153.

ORIENTATION AND MOBILITY
Level 3
C. Motor Coordination

TEACHING STRATEGIES
MATERIALS

The student:
Demonstrates ability to lie down.

Demonstrates ability to roll.

Demonstrates ability to scoot.

Demonstrates ability to sit.
Demonstrates ability to kneel.

Demonstrates ability to craw1.

Demonstrates ability to stand.

Demorstrates ability to walk.

Demonstrates ability to march.

Demonstrates ability to jump.

Demonstrates ability to hop.

Demonstrates ability to run.
Demonstrates ability to side-step.

Demonstrates ability to gallop.

Demonstrates ability to skip.
p. 157-158
p. 159-160
p. $161-162$
p. 163-164
p. $165-166$.
p. 167-168
p. 169-170
p. $171-172$
p. 173-174
p. $175-176$
p. 177-178
p. $179-180$
p. 181-182
p. 183-184
p. $185-186$

A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired.

ORIENTATION AND MOBILITY
Level 3
C. Motor Coordination

The student:
Demonstrates ability to stretch.

Demonstrates ability to push and pull.

Demonstrates ability to twist.

Demonstrates ability to bend.

Demonstrates ability to stoop and squat.

Demonstrates ability to climb.

Demonstrates ability to grasp.

Demonstrates ability to throw.
p. $187-188$
p. $189-190$
p. 191-192
p. 193-194
p. $195-196$
p. 197 - 198
p. 199-200
p. 201-202

## ORIENTATION AND MOBILITY

## D. Sensory Modalities

"The success that an individual has with the orientation and mobility process is highly dependent upon that individual's perception of his environment. A visually impaired youngster must become aware of his development of his remaining senses. We can assist the youngster by teaching him how to interpret and be aware of all clues around him. If residual vision is present, all efforts should be made for effective utilization of vision in all activities. The youngster should be able to make use of sounds; recognize tactual clues and landmarks; recognize the smell of a bakery, the sound of an idling car and feel the declining sidewalks as he approaches the curb. In other words, he should be able to place all of his environmental clues in proper perspective so he can become entirely familiar with his surroundings and very knowledgeable about his whereabouts.

The essential skills, relative to sensory modalities, should be placed within the context of the educational situation. This section presents many activities, materials and references to enable the teacher to do this.

An evaluation chart is included for each sensory modality to serve as a guide in pre- and post-testing. A reference outline is also incorporated at the beginning of each sense to provide guidelines in each specific area. A list of the materials in the Low Vision Kit is included in this section.

These sensory modality areas are by no means complete. The teacher is encouraged to elaborate on materials, references and activities by adding ideas to these pages." 6

6
A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired, Illinois Office of Education, p. 206.
with the following variable:

- distance
- size
- illumination
- figure-ground contrast
- stationary
- moving.

2. Auditory Modality

Demonstrates recognition of sound.

Demonstrates ability to localize sounds.

Demonstrates ability to discriminate and identify sounds.

Demonstrates ability to localize sound source in relationship to the listener.

Demonstrates ability to identify and confirm sound.
Demonstrates ability to use sensory devices.

1. Visual Modality

The student:

Identifies specific objects
p. 208-217

Note: A hearing assessment is necessary at the beginning of each school year to ensure that the student does not have a hearing impairment.
p. 218-231
p. 218-231
p. 218-231
p. 218-231
p. 218-231
p. 218-231

TEACHING STRATEGIES
MATERIALS

A Curriculum Guide for th Development of Body and Sensory Awareness in the Visually Impaired.

ORIENTATION AND MOBILITY
Level 3
D. Sensory Modalities

The student:

Demonstrates understanding of mobility concepts.
3. Tactual Modality

Identifies a surface or an object through the tactual sense whether using hands and/or feet.

Demonstrates ability to make distinctions between various objects.

Demonstrates ability to confirm the object tactually.

Demonstrates ability to obtain knowledge through his senses.
4. Olfactory Modality

Demonstrates ability to identify various odors.

Demonstrates ability to make distinctions between various odors.

Demonstrates ability to confirm a particular odor.

Demonstrates ability to obtain knowledge of the object through his senses.

## 5. Gustatory Modality

Demonstrates ability to identify a particular product through its taste.
p. 218-231
p. 232-239
p. 232-239
p. $232-239$
p. $232-239$
p. $240-245$
p. $240-245$
p. $240-245$
p. $240-245$
p. 246-251

## The student:

Demonstrates ability to make
p. $246-251$
distinctions between various edibles.

Demonstrates ability to confirm particular taste.

Demonstrates ability to p. 246-251
obtain knowledge of the edible through his senses.
OBJECTIVES
-

OBJECTIVES

The student:
Identifies a variety of foods and their sources.

Classifies food into appropriate food group.

Demonstrates ability to select a balanced meal.

Demonstrates knowledge of the rules of good eating.

Demonstrates understanding of junk food to be avoided between meals.

TEACHING STRATEGIES
MATERIALS

Go on field trip to neighborhood grocery store, dairy, bakery, etc.

Make a "Grocery Store" corner. Label (braille, large print, texture) four plates according to the four food groups.

Have student place food on the correct food plate.

Read and discuss stories, poems; sing songs about food.

Have class discussion about nutrition.

Discuss what food groups need to be combined to form a balanced meal.

Serve nutritious snacks in class.

Use class discussion and experience with nutritional snacks.

Discuss advertisements of products directed at the child consumer, e.g. sugar coated cereal.

SAVI Kit Unit 1. Scratch and Sniff Books.
Me. Sketch felt pens.
Peabody Song Kit, Level 1.
Learning About
Fruits We Eat.

Materials from Milk Foundation and Medical Associations. Canada Food Guide. General Foods Corporation Materials. Nutrition Communication.

TEACHING STRATEGIES

Use body image test to establish what student knows.

Play "Simon Says".

Have student locate body parts in musical games.

See Orientation and Mobility section, Understanding Self and Getting Along With Others section.

Have a classroom pet.

Teach student to develop correct vocabulary for body parts and functions in relation to himself and animals.

## 2. Care of the Body

Demonstrates some independence in matters of personal hygiene.

Assumes some responsibility for personal belongings, e.g. grooming articles.

States reasons for taking good care of the body.

Peabody Language Development Kit.

Sex Education and Family Life for Visually Handicapped Children and Youth. Sex Education for the Visually Handicapped in Schools and Agencies. Growth: A Handbook of Classroom Ideas to Motivate the Teaching of Elementary Health. The Spice Series.

## HEALTH

Level 3
B. Personal Care

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

The student:

Practises physical fitness program.

Demonstrates knowledge of what to do in case of minor illness.

## 3. Drugs and Alcohol

Takes drugs only when administered by parents, guardians or medical personnel.

Differentiates between vitamins and drugs.

Go on field trip to health clinic.

Have student practise during physical education class.

Set up interest centre, e.g. doctor's office with real equipment whenever possible.

Invite guest speaker, e.g. school nurse.

Discuss when drugs are administered, e.g. for illness. Stress the fact that medication should only be taken when administered by parents, guardians, medical personnel.

Discuss purpose of taking vitamins as opposed to the purpose of taking drugs.

Health and Safety for the Young Child.

Medical Kit (toy).

The student:

Identifies health helpers and their function.

Demonstrates knowledge that these workers are there to help us.

Demonstrates understanding of places to go to for medical help.

Recognizes the importance of having a family doctor or dentist.

Invite guest speakers:
health helpers, e.g. doctor, nurse.

Set up interest center, e.g. doctor's office.

Go on field trip, e.g. to hospital, clinic.

Have class discussion.

Role play telephoning to make appointments with doctor and dentists.
A. In The Home

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: <br> Demonstrates awareness of common accidents which might occur within the home. | Discuss sources of danger, e.g. toys on stairs, dangers in kitchen area, care in the use of potentially dangerous substances. <br> Describe or role play common causes of accidents and ways of preventing these. <br> Demonstrate proper use of household tools, e.g. electrical appliances. | Peabody Song Kit, Leve1 1. <br> How to Have an Accident at Work; How to Have an Accident in the Home; I'm No Fool Having Fun; I'm No Fool With Electricity (films). Home Safety Kit. Curriculum Guide for Elementary Health. |

With assistance, demonstrates safe use of kitchen tools, appliances, etc.

Follows adult instruction about fire drill in the home.

The student:

Demonstrates awareness of dangerous situations which might occur within the school.

Dramatize correct procedure for handling sharp tools, e.g. scissors.

Practise classroom etiquette, e.g. taking turns, keeping aisles clear of obstacles.

Discuss ways to prevent
injury, e.g. proper disposal of glass.

Sing safety songs.

Make safety booklets.

Tour school buildings.
Tour school playground to locate safe and unsafe play areas. Use resource person: Orientation and Mobility Instructor.

Discuss safe places to engage in various activities, e.g. playing ball.

Peabody Song Kit Level 1.
Playground Safety; Safety after School; Dangerous Playground (films).

The Fall Down, Break a Bone, Skin Your Knee Book.

The New Elmer the Safety Elephant.

Let's Find Out About Safety. Curriculum Guide for Elementary Health. Health and Safety for the Young Child.
C. In The Community

The student:

Demonstrates understanding
of different types and
magnitudes of disasters.

## SAFETY

Level 3
D. Fire

The student:

Demonstrates awareness of the most common forms and causes of fire.

Identifies the proper use and misuse of fire.

Demonstrates knowledge of fire prevention and fire safety.

Have a class discussion about the dangers of playing with fire, e.g. matches, candles.

Discuss visible flame and electricity as sources of heat.

Have class discussion on the usefulness of fire in heating and cooking.

Take field trip which includes cooking of hot dogs, and marshmallows in an approved area for camp fire.

Discuss basic fire hazards such as matches, candles.

Discuss accidents occurring in the kitchen, due to cooking and fire.

Discuss proper storage of flammable materials.

Go on field trip to fire station.

Discuss some of the ways in which the student can prevent fires.

Demonstrate and practise what to do in case of fire: STOP, DROP AND ROLL; EVACUATE AND ALERT.

Fire Safety, Grade 1 (revised edition).

Fire in Town.
I'm No Fool With Fire (film).

Curriculum Guide for Elementary Health.

The student:

Practises good fire prevention habits.

Responds to fire alarms appropriately.

Bring in guest speaker, e.g. firefighter.

Discuss electrical fire prevention.

Have fire drill. Practise alternate routes.

Make sure each student knows his own address.

Demonstrates understanding of the importance of using seat belts.
(partially sighted) and sounds to avoid danger.

Demonstrates appropriate behavior on bus or other vehicles.

Demonstrates ability to seek help from responsible adult if hurt, frightened or lost.
Demonstrates awareness of the role of the safety patrol.

Demonstrates ability to respond to traffic sights

Use role play.
Have a class discussion.

TEACHING STRATEGIES

Bring in guest speaker, e.g. member of safety patrol.

Use specific strategies as listed in resource material.

## MATERIALS

Illinois Curriculum Guide for the Development of Body and Sensory Awareness.

Curriculum Guide for Elementary Health.

Practise use of emergency door.

Discuss proper bus etiquette and respect for driver's authority.

Have class discussion about reasons to refuse rides with strangers and reasons to refuse to talk to strangers.

Invite guest speaker,
e.g. block parent, police.

Demonstrate correct way to loan and unload school bus.

Early Childhood
Traffic Education - A
Series of Pamphlets:

- Parent's Guide for Action, Preschool
Children in Traffic;
rent, pollce.
- When I Go Outside;
- I Listen and Look for Cars Coming;
- Traffic Signal Lights.

WORLD OF WORK
Level 3
A. Specific and Allied Work Skills

## OBJECTIVES

## TEACHING STRATEGIES

MATERIALS

## 1. Use of Tools and

Equipment
The student:

Identifies more tools and demonstrates greater proficiency in their use, e.g. hand saw.

Follows simple rules of organization and care of tools and materials.

Constructs simple project independently.

Demonstrates ability to follo' safety procedures wher using tools.

## 2. Follow Directions

Follows a more complex set of directions.

Identifies persons in authority in the school and immediate community.

Demonstrate correct usage of tools. Have student experiment with tools.

Label storage area in large print or braille where necessary.

Demonstrate and discuss correct storage. Have students store tools.

Discuss possible hazards associated with the tools in use and how to avoid injuries.

Provide clear and concise verbal directions; when appropriate, pair with written directions.

Praise student for successful completion of task.

Make posters of people in authority. Have class discussion about these people's responsibilities and how and why students relate to them.

Invite guest speakers; policeman, life guard, playground supervisor.
I.P.A. Manual, 1980. Workjobs I and II.

Tool boards, cubby holes, wall charts.

Attitude and Safety Posters.

Deal Me In.
Wall Charts.

Our Helpers.
3. Decision Making

The student:

Chooses independently
between two or more alternative activities.
4. Independence

Demonstrates ability to behave appropriately in unfamiliar situations.

Provide a variety of options
Learning Centers.

WORLD OF WORK
Level 3
B. Career Planning and Exploration
OBJECTIVES $\quad$ TEACHING STRATEGIES $\quad$ MATERIALS

1. Why Work

The student:
Recognizes that people need money.

Recognizes that parents have different work and incomes.

Demonstrates understanding that finishing tasks earns priase.

## 2. Job Awareness

Demonstrates awareness that people do different jobs: in home, in school, in community.

## 3. Job Demands

Demonstrates good work habits.

Demonstrates positive attitude towards work.

Demonstrates ability to follow instructions.

Completes selected tasks at school and home and begins to assume some responsibility for this.

Complete behavior management charts for each student to show work completed, working well with others, doing classroom jobs.

Have a discussion, "Why help others?" Compile list and display, "Why people work?" Give student simple jobs in class.

Increase number of directions.
Select class monitor. Develop "Jobs for the Week" charts.

Courtesy in the Community.

A Good Worker.

The student:

Recognizes some of own mistakes and corrects them.

Encourage students to criticize their own completed tasks or jobs.

Check student's work and get
him to suggest ways that work or work habits can be improved.

Demonstrates good listening habits.

Develop oral comprehension skills.

Read stories suitable for level and ask basic who, why, when, where type questions.

Unemployed Uglies.

Listen and Think Cassette Series, Levels A and B.

WORLD OF WORK
Level 3
C. Finding A Job
OBJECTIVES

The student:

Identifies parents vocations.

Identifies job/careers which may be of special interest to him.

Demonstrates ability to describe abilities and limitations for a specific job.

## 2. Awareness of Process

Demonstrates ability to use telephone.

Demonstrates ability to take and leave messages.

Recognizes that people must look for jobs.

Write list of job titles volunteered by class and discussion.

Have a class discussion, e.g. blind cannot be a pilot but can be a computer operator.

Role play with phone in classroom; stress clear speech and clear request.

Record these conversations and review.

Have students assist in conveying messages to school personnel.

Discuss necessity of work. Discuss or examine; ad section, help wanted section, notices, manpower vacancy cards.

Sign-A-Mite.
Career Cards.
Career Awareness.
Getting A Job.
I Want To Be ...
Books.
Ladybird Books.
Stories About Workers.

WORLD OF WORK
Level 3
E. Worker's Rights

The student:
Recognizes own self-worth and dignity.

Modern Workers for
Career Awareness.
D.U.S.O. Kit -

Level 1.

Level 3
A. Clothing
OBJECTIVES $\quad$ TEACHING STRATEGIES

## 1. Care

The student:
Recognizes own clothing.

Undresses/dresses with minimal supervision or help.

Provide each student with own clothes hook with braille. Print color or texture labels on hook and clothing. Discuss what is special about one's own specific clothing.

Demonstrate how clothing can be identified by the size of the buttons or zippers, by the texture, by the style of the collar.

Have available doll clothing of different textures. Talk about how they feel and look as student plays.

Use checklist to see level of student's competency.

Have student use own clothing when learning to button, zip, lace and tie. Guide student through action by placing your hands over his. Gradually withdraw help.

Have student wear easy-tomanage clothing. Use zippers and elastic waistbands as they are easier to manage than buttons, or use velcro fasteners.

Describe clothing as student is dressing, e.g. "Put on your green woolen jacket".

MATERIALS

Button Up: A Systematic Approach for Teaching Children to Fasten.

Towards Independence.

The student:

Seeks help if something is lost.

Accepts increasing responsibility for care of clothing.

Demonstrates ability to locate and use hangers and clothing storage areas appropriately.

Puts soiled clothes in appropriate place.

Recognizes when clothing needs repairs.

Discuss the importance of asking and receiving help in a courteous manner.

Use class discussion about responsibility of putting own belongings away.

Teach search techniques (information available from itinerant teachers/consultants). Emphasize clear passageway, circular search pattern.

Make housekeeping centre including dress up doll, clothes, and student's own clothing. Teach texture of actual clothing. Discuss color.

Play game: place individual article from each child into a pile and have student select his own article.

Encourage parents to help student organize clothes closet, e.g. categorizing clothes into school clothes, play clothes, etc. Teach to keep clothing in the same place and in the same order.

## 2. Selection

The student:
Identifies and selects clothing appropriate for each season.

Recognizes style appropriate for various uses.

Chooses own clothing for everyday wear.

Identifies various types of stores.

## 3. Construction

Identifies sewing tools.

Use open ended sentences, e.g. "When it's snowing, on my feet I wear ...".

Use role playing in housekeeping center.

Use class discussion on clothing worn for church, special occasions. Use open ended sentences, e.g. "In gym I wear ... on my feet".

Take field trips to variety of stores, e.g. men's clothing, women's clothing, shoe store.

Have student explore and use tools, e.g. needles, scissors.

Play games: "Mystery Box"; memory games: "In my sewing
basket I will have scissors, ...".

Do stitchery projects, e.g. lacing cards.

Materials Directory. Trade News.

Sew It Yourself.

## HOME MANAGEMENT

Level 3
B. Food

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

## 1. Shopping

The student:
Describes what a food store is.

Lists and categorizes food and other articles which can be bought in a food store.

Assists in selecting articles on food shopping list.

## 2. Eating

Identifies utensils.

Demonstrates ability to use and clean utensils.

Go on field trip to neighborhood grocery store.

Have class discussion on different types of food stores.

Set up interest center: grocery store (involve student in shopping for classroom store).

Play guessing game through taste, feel, texture, shape and smell.

Go on field trips to different departments, e.g. meat department: see side of beef before butchering and discuss packaging.

Go on field trip to food store after compiling a grocery list.

Discuss menu for which you are shopping and quantity of food needed.

Describe each utensil and have student manipulate.

Note: For specific techniques to develop skill in the use of the spoon, fork, knife, etc., refer to books and articles listed in the materials section.

Prepare snacks in class. Make student responsible for preparation and cleaning.

Look and Cook. Kids Cooking.

Lessons in Living.

Peabody Song Kit Leve1 1.
Learning About Fruits
We Eat.
Nutrition Communication
The First Book of Supermarkets.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: |  |  |

Demonstrates knowledge of appropriate manners and etiquette.

Demonstrates appropriate eating skills.

## 3. Preparation

Demonstrates understanding of mea:uring, counting, etc.

Uses simple kitchen tools and appliances with supervision.

Prepares simple snacks.

Demonstrates understanding of various foods in their whole and protioned states.

## 4. Serving

Prepares table for meal (sets table, clears table).

Have student practise during snack time.

Teach clock system,
e.g. peas at six o'clock,
meat at one o'clock.

Go on field trips to restaurant. Use role playing.

Invite guests for snack.

Have students prepare snacks during class time and invite other classes for snacks.

Have student practise during snack time and trail (feel) table to check complete setting.

Invite other classes for a snack.

Dishes and Utensils Instruction Lab.
A.B.C. Cookery.

Kids in the Kitchen.

Social Competency. Dishes and Utensils.

The student:

Demonstrates ability to serve simple foods.

## 5. Preserving

Describes function of a refrigerator and freezer.

Handles food with care and cleanliness.

Demonstrates understanding of the concept of perishables.

Stores food correctly (cupboard, refrigerator).

## 6. Production

Identifies food sources.

Have student practise during snacktime, e.g. serve crackers to other students.

Demonstrate and discuss the function of each part of the refrigerator, e.g. vegetable crisper.

Demonstrate and discuss what happens to food if it is not stored properly.

Demonstrate and discuss where specific foods should be stored.

Plant a small class garden. Make student responsible for caring for the garden.

Go on field trip to dairy, poultry farm, vegetable garden.
C. Maintaining the Home

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

## 1. Selection

The student:

Recognizes different types of homes.

Demonstrates knowledge of the organization of rooms and their purpose.
2. urniture and Furnishings

Recognizes what goes into a house.

Arranges furniture in own room.

## 3. Care and Maintenance

With assistance keeps own room clean.

Demonstrates ability to perform simple household tasks.

Have class discussion on types of homes, e.g. apartment, trailer, house, condominium.

Go on field trips, e.g. to homes under construction.

Have student build different kinds of homes with blocks.

Make a housekeeping center. Display house in the classroom.

Have student discuss layouts of own home.

Display doll house. Set up a housekeeping center.

Have a class discussion,
"Where in house do things be long", e.g. furniture, curtains, lamps, dishes.

Ask for a parent report.

Ask for a parent report. Make a housekeeping center.

The student:

Discuss various jobs,
e.g. dishwashing, putting belongings away.

Demonstrates ability to care for pets or plants.

Rotate classroom responsibility.

The student:
Recognizes that young children need care.

Demonstrates ability to help. with care of younger brothers and sisters.

Invite classroom guests: mother and baby.

Use stories, discussion and role playing.

Use stories, discussion and role playing.

Go on field trip to day care center.

Establish buddy system to have students help one another in various tasks.

MATERIALS

Money Makes Sense (Canadian Edition).

Uses money vocabulary.

Writes or brailles money amounts (1c, 25c, \$1.00).

With assistance, recognizes coins and bills in combination.

Consult itinerant teacher or consultant for instruction on blind techniques.

Note: All blind and some partially sighted students need a sighted person to identify their bills for them. Once identification has been made the student should learn a basic system for folding money. It is generally best to leave dollar bills unfolded. The student should establish his own method for folding other bills, e.g. fold lengthwise, fold in half width-wise. The easiest folding methods should be used for lesser denominations to make it more convenient for the student. The one denomination should always be folded the same way.

Use sorting and classifying games, matching games, counting games.

Set up activity center; play store with real money.

Go on a field trip to store, have students purchase items.

Provide practice.

MONEY MANAGEMENT
Level 3
A. Earning Money

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: |  |  |
| Lists sources of money <br> (parents, job, hobby). | Discuss pocket money, allow- <br> ance, parents, work. | Good Cents: Every <br> Demonstrates knowledge Guide to Making <br> that job must be completed <br> to earn money . |

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

The student:

Identifies places where goods can be bought.

Locates some familiar items in store.

With assistance, buys items independently with correct amount of money.

Recognizes advertising on television, radio, etc.

Demonstrates understanding that some things cost more than others.

Describes essential elements in basic living needs (food, shelter, clothing).

Demonstrates awareness of how his money is spent.

Demonstrates understanding that prices for familiar items may vary from time to time.

Uses some coin operated machines, with sighted guide.

Take trips to local stores.

Discuss advertising seen or heard at home.

Discuss things we could do without. Have students indicate things needed and items not needed; include luxuries.

Use role play for various situations, e.g. going camping.

Have students keep weekly record of classroom expenditures.

Discuss sales; examine how prices are reduced at times.

Visit one store over a period of time and record price change of familiar item.

Let's Go Shopping.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: |  |  |
| Demonstrates understanding of saving money for future purposes. | As a class project, have students earn money to achieve a goal. <br> Discuss why it is important to save money. | Braille games, e.g. Monopoly. |
| With assistance, opens a savings account. |  |  |
| Demonstrates knowledge <br> that items or money borrowed must be returned. | Role play situations, e.g. neighbor borrowing a tool, friend borrowing money. | One Penny, Two Penny. |

Discuss what would happen if these were not returned; discuss the consequences.

Discuss circumstances requiring borrowing.

## OBJECTIVES

1. Body Awareness
a) Body Parts

The student:
Identifies body parts.

Identifies types of movement body parts can do bend, curl, twist.

Leads a movement with body parts.

Uses body parts contacting and parting, e.g. fingers.

Uses body parts symmetrically or asymmetrically.
b) Weight Bearing

Supports his body weight with different parts of the body.

Transfer weight in a variety of ways from one body part to another.

Balances using various parts of the body for support.

TEACHING STRATEGIES

Guide exploration and discovery. Utilize the problem solving technique.

Use pieces of paper to demonstrate bend, curl, etc.

Use small dolls or figures so student can feel the position.

Note: Exercise is essential to develop coordination and strength in the hands and fingers and wrist flexibility for braille skills and future work in projectile skills and gymnastics.

Initially place student in desired positions.

## MATERIALS

Concept Development for Visually Handicapped Children.

Physical Education A Movement
Orientation.
Introduction to Movement Education An Individualized Approach.

Movement Education: Theory and Practise.

MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES
Level 3
A. Fundamentals of Movement

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| c) Body Actions |  |  |

The student:

Identifies and demonstrates the following forms of locomotion: walk glide run gallop hop skip jump leap crawl.

Identifies and demonstrates the following actions:
bend fall
turn pull
push shake
stretch whirl swing bounce rise twist sway beat.
d) Body Shapes

Makes various shapes while still and while moving.

## 2. Effort

Identifies and demonstrates the following effort qualities:

Weight: firm, fine Time: sudden, sustained Space: direct, flexible
Flow: bound, free

Ask student to identify different movements by listening to them. Discuss that
each different form of locomotion has a different rhythm and/or tempo.

Use appropriate auditory stimuli to motivate or suggest the desired movement.

Ask student to describe his movements and shapes verbally as he demonstrates.

Use either music or poems, e.g. haiku, or tactile stimuli like fabric, clay, elastic to initiate a quality of movement.

Contrast different qualities of movement by moving from one into another.

Movement Without Sight.
Basic Movement.

Wigwam drum and beater maracas.

MOVEMENT DEVELOPMENT AND PHYSICAL ACTIVITIES
Level 3
A. Fundamentals of Movement
OBJECTIVES $\quad$ TEACHING STRATEGIES $\quad$ MATERIALS

## 3. Space Awareness

The student:
Recognizes general space versus personal space.

Demonstrates levels in space, e.g. low, medium, high.

Demonstrates pathways in space, e.g. floor
patterns.
Recognizes large, small, near and far, up and down.
4. Relationships With Objects

Throws, catches and controls small, slow moving objects.

Travels under/over on small stationary pieces of apparatus.

Jumps off low objects.
5. Relationships With People

Carries out a sequence of movements alone, in a group(s), with a partner.

Give student a space to work in by separating spaces in the gym with mats or runners.

Start with small spaces ( 6 m X 6 m ) and gradually make them larger.

Set up stations in the gym using different pieces of apparatus in different relationships.

Use auditory cues for starting and stopping.

Use tactile cues for maintaining contact with a group.

Nerf balls, bean bags, hoops, wands, beeping ball.
Audible ball. Aud-a-ball.

Benches, ladders, stairs, boxes.
A. Fundamentals of Movement

OBJECTIVES |  | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

## 6. Gymnastics

The student:
Demonstrates various ways of transferring weight, e.g. role, jump.

Demonstrates various ways of supporting body weight, e.g. balance, hang.

Demonstrates a sequence of movement varying in direction and level.

Demonstrates the ability to use apparatus safely by: getting up, going along going under, going over and getting off pieces of equipment.

Climber.
Educational Gymnastics.

Vaulting box, pommel horse, bar box, mats, ladders, balance benches, climbing ropes, teeter boards.

## 1. Creative Dance

The student:
Explores movements and describes accompanying feeling, e.g. bending, curling, stretching.

Stresses body parts, e.g. repetitive foot movements in rhythmical phases.

Controls transfers of movement.

Controls balance.
Designs and changes body shape.

Utilizes space by changing size of space used, levels, directions, patterns.

Communicates emotion and meaning through movement performed.

Relates to a partner and to a group.

## 2. Games

Participates in games which include:
running and chasing, jumping, change of direction, quick start and stop, and tag.

TEACHING STRATEGIES

Designate separate spaces for each student.

Use plasticine as tactile stimulus for directions and patterns.

Use stories, music, poems and sounds as stimulus.

Adapt games by:

- using auditory stop/start cues, e.g. whistle, drum;
- identifying "it" with a noise maker;
- identifying boundaries with contrasing surface, e.g. rubber mats.

Basic Movement.

## MATERIALS

Percussion instruments.

Audible balls. Basic Movement Activities. Elementary Physical Education.
B. Games and Activities

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: | Avoid collissions by separating spaces or by having student carry hoola hoop around their waist; select games where only one student runs at a time. |  |
| 3. Posture |  |  |
| Describes good posture and demonstrates proper body alignment. | Use Yoga. | Movement Without Sight. <br> Adapted Physical <br> Education and <br> Recreation |
| 4. Swimming |  |  |
| Reco̧nizes basic principles of the water medium and the relationships of the human body to these principles. | Conduct water orientation on a one-to-one ratio. | Swimming for the Handicapped. <br> Swimming for Children with Physical and Sensory Impairments. |
| Participates in appropriate aquatics program. |  |  |
| Demonstrates movement skills to propel the body through water in various ways. |  |  |
| Demonstrates ability to control the body in shallow and deep water. |  |  |

## 5. Track and Field

The student:
Participates in some track and field activities.
6. Outdoor Pursuits

Participates in some
ODPU activities, e.c. camping, hiking.

## 7. Fitness

Participates in the CAHPER fitness program when it is done in his school.

Demonstrates yearly improvement in all times.

Use music boxes for the shuttle run.

For 50 meter dash use the international system to guide the runner down to the end of the land: yell 4 if the runner is in mid-lane, 3 if he is to the left, 5 if he is to the right.

For 300 meter run use a short running pole with a sighted runner holding one end.

Keep records of each student's performance to identify specific areas of weakness.

Canadian Fitness Awards.
A. Music
"In the area of music, visually handicapped children - contrary to lay belief are not gifted merely as compensation for blindness." 1
"... of all the avenues of communication open to the blind child, music is one of the most significant and thus of incalculable value. ... His auditory and tactile senses permit him to relate to music as a listener or a performer, and these experiences afford him many opportunities to participate on an equal footing with his sighted peers. ${ }^{\prime} 2$

The music curriculum for elementary schools developed by Alberta Education (1977) is suitable for use with visually impaired students. Since no music curriculum has been developed for either Junior or Senior High Schools, the visually impaired student should be integrated into the school's existing music program.

The following suggestions should be incorporated by the music teacher to assist her in successfully integrating the visually impaired student into her program.

## Rhythm Band

"Benefits derived from rhythm bands are the same for normally seeing as for visually handicapped students. However, teachers must assume responsibility for acquainting students with every instrument - the sound of it, how it feels in the hand - because otherwise each student will acquire only a limited knowledge about the instruments played by other students.

If the teacher points or gestures to indicate when students should or should not play, blind students will not receive such signals; therefore, teachers must adopt audible cues."

## Identification of Instruments

To facilitate recognition of tone quality, teachers should play instruments or use recordings, thus familiarizing the students with identifiable and characteristic sounds. Awareness that a voilin sounds like a voilin and not like a tuba is the lesson objective. A second step is to allow visually impaired students to handle and examine all the instruments. If the teacher plays a recording of a clarinet, students should have an opportunity to examine a real clarinet in class.

Instruments in a given family, e.g. strings, should be compared for sound, size, number of strings, position held when played, etc. Since experimentation is a channel for learning, the student might hold a string while it is being bowed and note the difference when he removes the finger. Also, differences between heavy and thin strings should be explored. How does the performer achieve legato and staccato effects?

Combinations of instruments can be introduced once the students have become acquainted with individual instruments. If live performers can be utilized, they might place themselves in various parts of the room so that the individual sounds can be more easily distinguished. In this exploratory stage, the human voice - alone and in combinations - should also be included. Having felt vibrations in other instruments, the students might feel vibrations in their throats and diaphragm.

Music and Self-Expression
Self-expression to the accompaniment of music is desirable for all students. Blind students, however, may be limited in their experiences when required to depict certain behaviors, as when the teacher says: "Pretend you are a bear and walk like one", or "Make believe you are a daisy blowing in the breeze". Therefore, blind students must be shown how to perform the intended action. The teacher might try to draw out ideas rather than impose them. She might say: "Listen to the music, and then make your feed do what the music seems to say", or "What do you think your arms want to do with this kind of music?". Under these conditions, visually impaired students experience no disadvantage.

Some blind students are reluctant to move out or do so only awkwardly or fearfully. Because of this, teachers might request them to "act out the music" right where they are. If students learn enough freedom and confidence while staying in one place, they may learn, though belated, how to move in an enlarged area.

## Music and Dance (Eurhythmics)

Eurhythmics involves following a prescribed pattern imposed by the teacher or choreographer. Students learn to coordinate body parts and work toward independence of separate members. Eurhythmics yields gains in muscular control and coordination, grace, poise, and self-confidence. However, more modern methods of rhythmical gymnastics give greater freedom of movement, encourage more self-expression through body movements.

Music Notation in Braille and Large Print
If sighted students are expected to read music notation on the staff at a given grade level, partially sighted students at that time should also have such competence in enlarged form. Teachers can use either specially prepared sheets with the enlarged staff adding notation by hand, or can purchase ready made enlarged sheet music if the desired title is available (see Note).

Occasionally a given community may have a sighted music teacher who knows braille music notation or a blind teacher of music with whom the student and his family might arrange private lessons for both notation and performance.

Visually impaired students, their parents, and their teachers must not jump to conclusions that careers in music are guaranteed and automatic. Frequently the presence of musical talent is overestimated. Interest and enjoyment are not enough to launch a career. Countless hours of arduous and lonely practice are imperative.

Visually impaired students in music have one of three choices if contemplating a musical career:

1. Serious music based on use of notation and exactly prescribed performances.
2. Popular music, which calls for the development of a personal style distinctive from that of other performers. If the visually impaired musician has a good ear for reproducing what he hears in live or recorded performances, he may have little or no need for notation itself.
3. Teaching music, which is similar to choice 非l, though it does not demand performance in concerts.

The student using braille notation must memorize it before being able to play it. This consumes much time and restricts the performer's repertory. Unlike a sighted person, who can do a reasonably accurate job even on his first exposure to a musical composition, the braille reader cannot "sight read" music. Partially sighted students have similar difficulties. Because of their visual problem, they may not be able to read quickly enough to read and play simultaneously; so they may have to memorize also. Furthermore, the partially sighted may need to use a special music rack that brings the sheet close to the face so that it can be read.

It ie hoped that the persistent will sell themselves on the quality of their musicianship and not on their blindness.

## Attending Professional Concerts

Although attending live performances has the same values for both visually impaired and their sighted peers, one difference lays in the inability of the former to read program notes distributed to the audience. There may not be sufficient time before the performance to allow a sighted person to read in whispers. Without these notes, the listener misses vital information pertaining to historical setting or analysis of art form. To correct this problem, teachers might secure advance copies of the program - often advertised in newspapers - and then play the same compositions at school, discussing pertinent information. A culminating experience might involve listening again to the same compositions after the concert and sharing reactions to the live performance.

Group Participation (Chorus, Orchestra, and Band)
Visually impaired students should be encouraged to assume active memberships in school organizations devoted to music. This type of integration with sighted peers may result in lasting friendships beyond the school year, in vocational channels (Bevan, 1965) and in keys that unlock social doors making possible broader interpersonal relationships. Some modifications are necessary, as outlined in the following paragraphs.

Processions and Recessions: Moving in straight lines equidistant from those in front and behind is important for aesthetic effects. If a blind student is paired with a sighted partner, they might link little fingers of adjoining hands in an inconspicuous way. An understanding teacher might have students proceed by twos instead of in single file when a blind student is a member of the group. When required to go in single file, a blind student might use a thin string held taut by the student preceding and following him with the string wrapped around his own finger halfway between the two. Being confronted with new territory poses the problem for blind students of not knowing distances or turns or the presence of steps, since rehearsals may be conducted in one place while the public performance is held elsewhere. If possible, arrangements should be made to take the blind student to the new site in order to orient him to it.

Marching Band: Partially sighted students may succeed as participants in a marching band, whereas blind students might find it extremely difficult to keep in line while marching and playing. However, blind students should be permitted to try doing it in rehearsals. Perhaps blind students can orient to a particular sound preceding them, such as a drum or flute.

Pairing with Partner: In chorus, band, or orchestra, visually handicapped students might be placed beside a capable musician singing or playing the same part. Such partners can serve as examples to emulate. In rehearsals, blind students can listen part of the time and later sing or play when the material has become familiar. The pair might work at times other than during rehearsals with the sighted performer playing or singing the part for the other to listen to and learn. When several persons make up a given section (such as tenors), the blind student should be seated in the front of the group so that more of the sound of his part reaches him.

Use of Recordings: If a student group is practising a given composition already recorded by another group and with the same arrangement, visually handicapped students might be assigned to study by listening repeatedly to that recording. Furthermore, the Division for the Blind and Physically Handicapped, Library of Congress, is producing kits containing sound recordings with music in usual renditions, also at a slow rate for study purposes, with solos unaccompanied, and with notation in both braille and large type. These materials can be of utmost value if the teacher's selection and the titles thus made available coincide.

Signaling: Music teachers who are not accustomed to having a visually handicapped student in the group may need to modify their signaling procedures. A nod or hand gesture will not be noted by him. Instead, a code of raps with the baton on the music stand might be devised.

Blind Soloist and Accompanist: Although use of the voice may be correct, blind soloists may need assistance with stance, facial expression, and gestures. If the soloist is blind, he can usually take his cue from the accompanist and the musical introduction, if there is one. If the accompanist is blind, he must be certain that the soloist is ready before beginning the introduction." 3

Note: The Materials Resource Centre, Department of Education, Alberta, has enlarged the sheet music available to Elementary Music teachers as part of the Edmonton Public School Board Music Curriculum. A teacher requiring music in large print should contact the itinerant teachers or provincial consultants for the visually impaired.
"Frequently only the words of a song need to be brailled. In fact, often memorization will suffice and no brailling is necessary." 4

Music for Visually Handicapped Children, Napier, Grace. The Visually Handicapped Child in the School.
The Importance of Music in the Life of a Visually Handicapped Child, Toodenough, Forrest and Dorothy. Education of the Visually Handicapped, $\mathrm{V}_{2} \mathrm{~N}_{1}$, p. 28, March, 1970.
Music for Visually Handicapped Children, Napier, Grace. The Visually Handicapped Child in the School.
4 Your School Includes a Blind Student, Willoughby, D., Lansing, S., Barber, M., Maurer, P. National Federation of the Blind Teachers Division, p. 18.

## B. Art

## INTRODUCTION

"A blind student can learn basic art concepts and create art projects in the same manner as a sighted child. His blindness does not make it impossible for him to learn the ideas of art or to participate in art activities.

The basic goals of teaching art to a blind child are the same as for a sighted child: t:o improve the child's ability to handle basic materials, such as scissors, glue, paper, and crayon; to develop an understanding of the elements and principles of design, to teach him the basic vocabulary of art; to make him aware that there are various ways to approach an art project; and to stimulate him to think creatively." 1

The following suggestions should be incorporated by the art teacher to assist her in successfully integrating the visually impaired student into her classroom.
"Blind children need to know where their materials are. Prepare a tray or box for each blind child with all the necessary materials before each activity.

A sighted partner is of great assistance to the blind child who may not yet have developed the skills of cutting, knot tying, pasting or taping. The sighted partner is also essential for providing feedback to the blind child. For example, in the tie dyeing activity the sighted partern describes the designs made by the dyes.

Blind children may need a little extra time to complete the art activity.

Blind children "see" with their fingers. Provide dampened paper towels for the child when an activity involves paste, clay, plaster, or pepier mache. Sticky fingers find it hard to manipulate materials.

Blind children must be warned not to touch their brailled watches unless their hands are clean.

Blind children should be involved in all demonstrations.

Brailled instruction sheets should be prepared for blind children listing steps of new techniques such as printing, papier mache, weaving.

Blind children should have access to models and objects used in the science activity during the art session. For example, the blind child needs to have contact with a model of the fish while creating a plaster fish, or models of the stages of life cycles when asked to create clay expressions of the life cycle.

A screen board can be used by blind children to create linear designs. The screen board is simply a wooden frame with screening attached tautly and securely over the open area. By placing a piece of paper over the screen and rubbing it with a crayon, a textured crayon design results.

The art work produced by blind children reflects very personal expression of a mental image not influenced by vision of the art work of other children. Encourage this personal expression. It is art in its purest form". 2 by Collien Freund. The New Outlook, p. 205.
Laboratory Science and Art for Blind, Deaf and Emotionally Disturbed Children, A Mainstreaming Approach, Doris E. Hadary, Ph.D., and Susan Hadary Cohen, M.A., University Park Press, Baltimore, Maryland, 1978.

## MATERTALS

## 2. Drawing and Painting

The student:

Demonstrates awareness of differences and descriptive aspects of line-drawing.

Demonstrates awareness of the forces of line, shape and color (painting).

## 3. Modelling

Using a variety of materials, demonstrates ability to create 3 -dimensional forms in such a way that understanding of the spatial elements (positive and negative) and textural and line qualities is promoted, e.g. sculpture.

Use textured paints, glue, sand, raised surfaces (screen) to make this activity more meaningful for the blind student.

Go on field trips to see and feel the linear aspects of buildings, machines, household objects, in the classroom.

Have students make straight and curved lines with fingers, arms, and body movements.

Do projects with wire.

No adaptation necessary for partially sighted. Use textured paints and varied surfaces for the blind. Surfaces should be smooth as well as textured, soft as well as hard.

Use tactual experiences with a variety of materials and media to show relationships of these forces and the idea with images of the studnet's painting.

Blind students should be allowed freedom to explore objects tactually:

- modelling
- sculpture
- constructing
- manipulative experiences with form.

Elementary Art Curriculum Guide. Drawing, Ideas, Materials and Techniques.

Exploring With Paint.

Creative Clay Work.
B. Art

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

## 4. Print Making

The student:

Demonstrates ability to feel, describe and depict simple textures in the environment, e.g. print making.
5. Weaving and Stitching

Demonstrates ability to make and decorate cloth through weaving and stitchery techniques as a means of relating the forces of line, shape, surface and color to the clothing and fabrics in his environment (fabric and fabric decoration).

Do relief printing with natural or found objects, printing from prepared surfaces, printing from curved surfaces.

Use stencil printing, spray paint, silk screen, sponge.

Provide experiences in the following:

- stitchery
- applique
- weaving
- decorating cloth
- baticking
- macrame.

Relief Printmaking.

A Practical Knowledge of Color for the Congenitally Blind. Teaching Art to the Blind Integrated with Sighted Ćhildren.
I Can Make A Rainbow.

The student:
Demonstrates relaxation, concentration and trust (individual activities).

Demonstrates personal expression through using a variety of body movements (teacher directed).

Demonstrates ability to respond through utilization of the five senses.

Demonstrates ability to use imagination to respond to situations in a variety of ways.

Demonstrates ability to communicate verbally and non-verbally.

Have students practise control of body parts.

Use exercises in concentration. Use highly stimulating exercises so concentration is easy.

Use exercises based on all aspects of movement, e.g. control, tension, rhythm and coordination, different types and rates of movement.

Use exercises to train students to become more aware of their senses.

Use role play.
Use imaginative physical exercises, e.g. taking walk in outer space.

Use imaginative speech exercises, e.g. describing adventures on a deserted island.

Note: Imagination is a necessary part of any improvision whether in movement, speech, character or story.

Discuss non-verbal expressions and gestures, e.g. shaking head for "no", facial expressions.

Use mime, pantomine, charades.

Creative Drama Elementary School.

Demonstrates ability to alter voice and speech patterns.

Discusses character's actions.

Demonstrates ability to give simple actions to characters.

Demonstrates knowledge that a story is made up of related incidents.

Demonstrates knowledge that an audience listens to views and enjoys a presentation.

Discuss verbal communication, e.g. conversations, discussions, reporting, interviewing.

Use exercises to develop interesting speech patterns; vary volume, pitch, rate, tone and pause of voice.

Use story telling, oral reading, choral speaking, puppetry, improvisation, plays.

Describe the character; focus on personality type, character idiosyncrasies, motives, etc.

Use mime, pantomime, role play, improvisation.

Have a class discussion about the elements which make up a story: character, setting, climate, plot.

Have students retell stories.
Provide students with opportunities and experiences in working collectively on a large project.

Child Drama in Action, A Practical Manual for Teachers.

Teaching With Creative Dramatics.

Creative Dramatics, An Art for Children.

Play-Acting in the Schools.

## D. Leisure Time Activities

It is important that visually impaired students learn games and activities appropriate to their age which will enable them to participate in social relationships with their peers. At this level it is recommended that the students be taught some of the following: Monopoly, checkers, tic-tac-toe (3-dimensional), bingo, card games - war, fish, old maid, crazy eights, rummy, Chinese checkers, dominoes, parcheesi. All of the above games have been adapted for the blind and are available from the American Foundation for the Blind, 15 West 16 th Street, New York, New York 10011.

Electronic games such as Simon, which are auditory in nature, are also appropriate for visually impaired students.

It is also highly desirable for visually impaired students to engage with a sighted companion, in active recreational pursuits such as: walking/hiking, cross country skiing, snowshoeing, swimming, horseback riding, bowling, tandem bicycling, ice skating, roller skating, gymnastics, yoga. The visually impaired student should also be involved in other leisure time activities such as lietening to music, playing a musical instrument, creative play, reading for pleasure, crafts and hobbies, and in community activities such as Cubs, Brownies, and programs offered by the Y.M.C.A. and Y.W.C.A.
A. Home and Family

The student:

Identifies own family members by role, name and responsibility.

Identifies ways in which immediate family is unique.

Initiates family conversations.

Assumes responsibility for self appropriate to age, e.g. dressing self, snack preparation, keep room tidy.

Differentiates between personal, family and public property.

Identifies privileges and consequences associated with family roles and routines.

Demonstrates awareness that families change over time.

Identifies and differentiates between community helpers.

See Understanding Self and Getting Along With Others.

Use class discussion of family composition.

Have class discussion.

Have students construct "My Family Book". Have blind use a variety of materials for construction, e.g. pipecleaners, felt, wool.

Encourage parental follow-up.

Use monitors in classroom.

Chart completion of home responsibilities.

Have class discussion on importance of peoples privacy.

Define personal, family and public property.

Discuss roles and expectations of each family member.

Have class discussion on the effect of death, divorce, marriage, and birth.

Bring in guest speakers such as: block parent, firefighter, policeman, nurse.

The student:
Identifies classmates and significant staff members by role.

Participates in conversations, demonstrating ability to listen and respond.

Accepts responsibility for personal property.

Demonstrates respect for the personal property of others within the class.

Identifies school rules.

Participates in decisions regarding rules.

Identifies privileges and consequences associated with school rules and routines.

Accepts responsibility for own behavior and duties appropriate to age.

Responds to authority in the classroom and school.

Discuss differences in roles.

Establish classroom routine, make each student responsible for own property.

Have class discussion on importance of respecting private and public property.

Have students help establish classroom rules. List and discuss school rules.

Encourage parental follow-up.
Use classroom monitors.
Chart completion of school responsibilities.
C. Community and Country

The student:

Describes what constitutes a community.

States the role and function of common neighborhood facilities:

Identifies common community helpers.

Demonstrates awareness of the concept of authority.

Demonstrates understanding that all individuals are members of communities, with community rights and responiibilities.

States the name of his community, town or city, province.

Identifies the Canadian Flag.

Demonstrates awareness of cultural differences within own community.

Demonstrates knowledge of community rules and routines.

Have class discussion about purpose of playground, community center, etc.

Bring in guest speakers, e.g. scout leader, minister.

Have class discussion on the authority figures and agencies within the school and community, e.g. patrols, policeman.

Teach to mastery.

Have students draw/construct copy of Canadian flag.

Discuss significance of the maple leaf.

Discuss various cultures and their traditions.

Bring in guest speakers, e.g. safety patrol discussing safe use of crosswalks.
D. Current Events

Recognizes that events occur outside of home and school.

Recognizes that television, press and radio, help disseminate information.

Recalls daily weather report.

See Social Studies Curriculum.

Read current newspapers to class.

Listen to a radio or television newscast and recall and discuss.

Have students listen to a pre-assigned chart to be looked after by assigned students; use braille chart for blind students.

Have students make simple weather predictions based on current weather reports.
E. Environmental Education

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| 1. Ecology |  |  |
| The student: |  |  |
| Classifies living organisms. | Have student plant and care for a garden. Ask the family to make a special event of using the produce grown by the student at a meal. | Creative Science <br> Experiences for the <br> Young Child <br> (activities). |
|  | Play the game of "Animal Imitations": "Look at me! I am a ... (spider, cow, bird, etc.)". |  |
|  | Keep some living things in the classroom, e.g. gerbils, fish, plants, canaries. Provide the opportunity for students to care for living things. |  |
| Identiries basic requirements necessary for growth of living organisms. |  | Take a Look at Nature (activities). |

Identifies environments where plants and animals live.

Identifies appropriate ways to behave with wild and domestic animals.

Using straw, string, twigs, have students make a nest for Easter eggs or for a toy bird; use pictures of nests and a sample nest.

Have class make an ant-hill from clay, or a model beaver lodge from twigs.

Bring a dog, cat, rabbit, etc. into the classroom and by example and instruction convey the importance of proper handling. Permit students to pet or hold animal to show an understanding of this concept.

Creative Science
Experiences for the
Young Child
(activities).

Take a Look at
Nature (activities).

CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
Level 3
E. Environmental Education

The student:

Demonstrates some understanding that parks are conservation areas.

Recognizes and appreciates man as a builder of the world of nature.

Assumes some responsibility for the care of a living organism.
2. Natural Phenomena

Describes weather from outdoor conditions.

Identifies some characteristics of each season.

States how weather affects daily life.

## 3. Energy

Identifies sources of heat and light.

Recognizes the need to modify climate by such techniques as heating houses or clothing.

## 4. Pollution

Identifies and disposes of litter.

In school, or in cooperation with the home, have student care for plants or pets.

Make an automobile litter bag from a coat hanger and a plastic bag.

Let's Find the Pollution Solution (filmstrips).
OBJECTIVES $\quad$ TEACHING STRATEGIES $\quad$ MATERIALS

The student:

States reasons for not littering.

Recognizes that clean air/ water is necessary for good health.

Identifies several jobs and workers who help us to preserve the environment, e.g. grounds-keeper, streetcleaners, garbage collectors.

Use this opportunity to emphasize the danger of plastic bags.

Take the students onto the school grounds and have them pick up the litter that is found there. Have them use their litter bags on this exercise. Stress the fact that they are doing other people a service.

Explain how many of the activities of man can make the air "dirty".

Discuss pictures that illustrate this concept. Play the "Clean-dirty" game in which a picture of a factory belching out pollutants will get a groan from the class while a shot of a pristine meadow will get applause. Provide explicit descriptions.

Demonstrate the concept that water may be polluted or contain harmful substances and yet look clean. Mix salt into glass and compare it to a glass of clean water. They look the same but are not. Provide explicit descriptions.

Use the opportunity of actually encountering these workers in the performance of their tasks. When the school yard grass is being cut, take the students out to observe the job being done.

Pollution Solutions (mobile).
$\longrightarrow$

Recognizes his responsibility to preserve the environment, e.g. not damaging trees.

Demonstrates awareness of various ways to conserve energy.

## 6. Safety

Demonstrates knowledge of safety rules that apply to the outdoors.

Using litter found on the school grounds, have the students make a litter poster, mobile, statue, etc.

Have the students bring a refundable container to school or have them find hidden containers on the playground. After these have been collected or found in the "treasure hunt" take the class to a friendly neighborhood store to convert them to money and buy a "goodie" with the returns.

Show examples of recycled products.

Have a senior class prepare and present a short skit about a lost child who follows the correct procedures when he is lost on a family picnic.

Demonstrates knowledge of the dangers inherent in everyday outdoor tools and chemicals.

States, discuss and follows water safety rules.

Demonstrates awareness of the danger inherent in fire and the effect that it can have on the environment.

Demonstrates the knowledge of various unsafe outdoor practises, e.g. drinking water from unsafe sources, eating, snow, eating wild berries, mushrooms.

Teach recognition of signals. One whistle means "FREEZE". Two whistles mean "COME HERE". Practise this procedure BEFORE going on any field trips.

Show the class the "grown-up" tools that they are not allowed to use.

Explain why these are not to be used by children.

Explain and give examples of dangerous chemicals and discuss the importance of having a parent or other adult apply or use such things as sprays, fuels, etc.

Show a film about children and matches. Introduce "Smoky the Bear" or "Paddy the Beaver" and talk about forest fires. Provide explicit description.

Melt a glass of dirty snow in the classroom to show why one should not eat it.

Collect and show some of the most common berries that the students might encounter and which they must avoid, e.g. dogwood, cottoneaster, honeysuckle, etc.

Stress that no berries are to be eaten unless given by a responsible adult.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| 1. Personal Characteris-tics/Self-Identification |  |  |
| The student: |  |  |
| States/writes/brailles/ locality, province, country, ethnic background, ages of family members, birthdate, class, roomnumber. | Provide oral instruction and reinforcement. <br> Have each student make personal information scrapbook. | Raised maps (done on foil). |
| Identifies extended family relationships. |  |  |
| Identifies significant others by physical and behavioral cues. |  |  |
| Identifies, demonstrates or describes some interests or preferences, $a b$ lities or talents, e.g. sports, arts, cooking. | Have a class discussion. <br> Have student write biographies <br> Form classroom hobby clubs. | Magic Circle. <br> Schools Without Failure. |
| Recognizes and accepts physical limitations (poor vision, lack of strength). |  | D.U.S.O., Level 2. A Cane in Her Hand. Getting to Know Myself (record). Connie's New Eyes. All About You. |

## 2. Physical Self

Interprets and categorizes appropriate visual images, sounds, tastes, smells and tactile experiences.

Make a list of terms related to the senses.

Go on field trips.
Practise in art classes.
Play games, e.g. mystery box game, math and science games, music games: distinguishing different instruments.

Raised maps (done on foil).

Magic Circle.
Schools Without Failure.
D.U.S.O., Level 2.

A Cane in Her Hand. Getting to Know Myself (record). Connie's New Eyes. All About You.
A. Knowledge of Self

The student:
Recognizes concepts related to growth and development (age, height, weight, strength, increasing knowledge and skills).

Identifies physical differences and similarities between self and others.

Identifies sex differences between males and females, including appropriate identification of primary and secondary sexual characteristics.

## 3. Emotional Self

Identifies specific emotions in self and others.

Identifies emotions from a variety of stimuli in pictorial and written form (for partially sighted) and brailled materials (for blind) through both verbal and non-verbal cues.

Identifies causes of emotions.

Identifies consequences of emotional reactions.

TEACHING STRATEGIES

Have class discussion.
Make growth charts.
During physical education practise related activities (arm wrestling).

Bring in appropriate guest speakers, e.g. school nurse.

Have class discussion.
Discuss in health class.

Use class discussion and role modelling of various emotions, e.g. being excited, nervous, happy, sad, angry, fearful, left out.

Have class discussion.

## MATERIALS

Getting to Know Myself (record). All About You.

Braille Models. Plastic models of human bodies.
Braille Representation
of Sexual Organs.
Social Learning
(curriculum kits).
Primarily Me, Mostly

Getting to Know Myself (record). All About You.

Interaction IV series.
understanding self and getting along with others
Level 4
A. Knowledge of Self

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: |  |  |
| Recognizes signs and causes of stress in self and others. | Teach students to verbalize stress responses (expression, posture, verbalization). | Magic Circle. Toward Affective Development. |
| Practises relaxation, with guidance. | Utilize relaxation exercises which are either scripted or on records. | Centering Book. |
| Expresses emotions appropriately in a variety of situations. |  |  |
| Demonstrates understanding of the difference between being assertive and being aggressive. |  |  |
| Begins to use appropriate verbal or physical behavior instead of agressive acts in response to provoking sit:sations. | Role play arguments, agreements, fights; discuss alternate ways of handling situations. |  |
| Recognizes how a stressful situation could have been avoided, or handled more appropriately. | Read stories which reflect problems of students in class and offer suggestions for solutions. |  |

TEACHING STRATEGIES

Have a class discussion about advertising influence on needs and wants.

Have students tape record collection of favorite radio and television commercials to analyze.

Use class discussion to show that individuals have different needs.

Identifies basic needs of safety, belonging and adequacy.

Identifies how basic needs can be provided for.

Recognizes the relationship between behavior and needs or motives.

Identifies an increasing number of situations in which people need help (alone, left out, failure, rejected).

Identifies sources of help including family, school, community, health and mental health personnel.

Use role play, appropriate stories.

Hold classroom meetings.

Invite appropriate guest speakers.

Take field trips.

MATERIALS

Magic Circle.

Schools Without Failure.
OBJECTIVES

## The student:

Given a situation, indicates appropriate responses to persons in varyịng roles (sibling, classmates, stranger - child, stranger adu1t).

Demonstrates respect, protection, cooperation, caring for other people.

Shares interest with peer group of same and opposite self.

## 3. Handling Social Interaction

a) Expressive Communication Skills

Communicates more effectively with others (appropriate assertion for needs, direct messages).

Practises appropriate questioning techniques.

Communicates effectively with others in socially appropriate ways.

Participates in various forms of communication, e.g. group discussion.

Use role play, stories, modelling.

Girls and Boys Book of Etiquette. Focus on Self Development: Involvement.

Use appropriate stories, class discussion, role playing. Have teacher serve as a role model.

Teach appropriate ways to demonstrate caring for others, extending and receiving greetings, giving and accepting compliments, apologizing for breaches of social conduct.

Girls and Boys Book of Etiquette.

The student:

Recognizes and uses appropriate speech in social situations.

Identifies and deals with some blocks to communication in self and others.

Communicates a wider range of feelings to others.
b) Receptive Communication Skills

Demonstrates that he has attended to an activity following directions (describing it, identifying the main idea, paraphrasing, answering questions).

Demonstrates listening and attending behaviors.

Identifies behaviors which show when a person is listening or attending.
c) Problem Solving and Decision Making

Identifies what information is needed to make decisions.

Given steps in problem solving, demonstrates understanding of the process.

Recognizes that alternative choices may be made.

Discuss effects of interrupting, blaming, irrelevant comments, put-downs, domination.

Use on-going classroom management.

Use role playing and class discussion.

Use appropriate books and tapes.

See Level 3.

Schools Without Failure.
B. Social Relationships

Identifies school rules and recognizes transgressions of these.

Follows rules of appropriate 'uehavior in school and on the playground, without direct supervision.

Identifies consequences of breaking rules (in community).

Identifies the need for routines and rules (order, protection, equality).

Identifies situations which require the establishment of routines or rules in school or on the playground.

Recognizes need to follow rules when travelling, either alone or with sighted guide.

See Citizenship and Individual Responsibility.

Use class discussion, role playing and appropriate materials.

TEACHING STRATEGIES
MATERIALS
5. Social Roles

The student:
Identifies roles associated with the school and states some of the characteristics of these roles.

Assumes leader roles in the classroom/playground with peers in structured situations (games, classroom activities).

Begins to recognize that roles may involve rights and privileges, duties and obligations.

Recognizes that people have multiple roles (teacher, friend, student, nurse).
6. Values and Social Expectations

Demonstrates appropriate behavior in home, school and community.

Demonstrates awareness of differences in cultures existing in community and province (including Indians, other ethnic groups, special events, etc.).

Recognizes basic societal values (honesty, kindness, helpfulness, cooperation, courtesy).

Use role playing and class discussion.

Use appropriate on-going classroom management techniques.

Have student talk to relatives and friends, report back to class.

Arrange for appropriate classroom visitors.

Have class discussion, guest speakers and field trips.

Girls and Boys Book of Etiquette.

UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
Level 4
B. Social Relationships

OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

The student:

Identifies the behavior which best illustrates a given value.

Recognizes violation of basic societal values.

Recognizes that most rules are for the protection of individuals.

Indicates what might happen if given rules were broken.

Have a class discussion about loyalty, respect, acceptance, freedom, equality, responsibility, understanding, interdependence, individuality.

Use role playing.

Have a discussion about safety rules.

See Social Relationships, 4. Rules and Routines.

The student:

Identifies and classifies food into the four basic food groups.

Demonstrates knowledge of a balanced diet.

Demonstrates knowledge of the relationship between good eating habits, growth and development.

Demonstrates understanding of the lack of nutritional value in "junk food".

Invite guest speaker, e.g. dietician, cafeteria manager.

Take field trip to supermarket.

Have student keep a diary for one week of food eaten.

Discuss the four basic food groups and the combination food groups,
e.g. stews, pizza.

Have students compare what they ate as recorded in their diaries with Canada Food Guide and try to identify where improvements in diet could be made.

Discuss the value and importance of following the Canada Food Guide,
e.g. meat provides us with protein, iron, the B vitamins, vitamin $A$ and fat; protein builds new tissue and repairs damaged tissue.

Have student compare nutrient value of different forms of the same food, e.g. baked potatoe, french fries, potato chips.

Discuss foods that have very little nutritional value, e.g. jam and candy.

Milk Foundation Materials.

Canada's Food Guide and Teacher's Handbook.

Food Fuel for the Body (film strips).
You and Your Food (film strip).
Food and Growth (film strip).

OBJECTIVES |  | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

1. Knowledge of Body

The student:
Identifies functions of body parts.

Recognizes secondary physical and sexual changes.

## 2. Care of the Body

Demonstrates independence in principles of body cleanliness.

Assumes responsibility for care of personal belongings, e.g. grooming articles.

Identifies methods of maintaining a strong healthy body.

Introduce the anatomical characteristics of males and females using elementary and clearly defined terminology.

Discuss and list the ways to care for body.

Provide braille/large print labelled hangers and lockers.

Use on-going classroom responsibilities.

Invite public health nurse as guest speaker.

Have class discussion on the importance of good food, plenty of exercise, and sleep. See Health, A. Nutrition section.

All About the Human Body. Human Growth. Food and Growth (film). Sex Education for the Visually Handicapped in School and Agencies. Sex Education and Family Life for Visually Handicapped Children and Youth.
Growth: A Handbook
of Classroom Ideas
to Motivate the
Teaching of Elementary Health.
The Spice Series. Braille Representations of Sexual Organs.

Values for Health.

Level 4
B. Personal Care

The student:

Practises physical fitness program.

Demonstrates knowledge of what to do in case of minor illness.

Demonstrates knowledge of how and when to administer first aid for minor accidents.

## 3. Drugs and Alcohol

Recognizes that there is a difference between prescription and nonprescription drugs.

Recognizes that drugs may have negative effects.

TEACHING STRATEGIES

Have student practise during the physical education class.

Invite guest speaker, e.g. school nurse.

Go on field trip to health clinic.

Invite guest speakers, e.g. nurse, ambulance attendants.

Have students discuss personal experiences.

Invite guest speaker from AADAC (Alberta Alcohol and Drug Abuse Commission), pharmacist.

Films: Alcohol: The First Decision; Almost Everyone Does; Drugs:
The First Decision;
Easy Way Out; First
Cigarette; Let's
Discuss Smoking.
About Drugs.
Alcoholics Anonymous. materials.
Facts About Alcohol.
What You Should
Know About Drugs.

OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

The student:

Identifies medical personnel and their function.

Identifies hygiene personnel and their function.

Identifies mental health personnel and their function.

Demonstrates ability to use emergency phone numbers.

Recognizes the importance of having a family doctor and dentist.

Invite guest speaker, e.g. doctor, nurse, dentist.

Go on field trip to health clinic.

Have a class discussion about the duties and responsibilities of various hygiene personnel, e.g. garbagemen, street cleaners.

Have a class discussion about the duties and responsibilities of various mental health personnel, e.g. school psychologist, social worker.

Invite guest speaker, e.g. school counsellor.

Use class discussion about appropriate times to use emergency phone numbers.

Invite guest speakers, e.g. operator from the emergency (911) phone line.

Use role play.
Have a class discussion.

Emergency Room.

## MATERIALS

The student:
Demonstrates increased awareness of common accidents which could occur in the home.

Demonstrates safe use of kitchen tools, appliances, etc.

Follows appropriate procedures for fire drill in the home.

Discuss potential danger
situations in the home, e.g. poisons, drugs, firearms.

Dramatize common causes of accidents and ways of preventing them, e.g. falls.

Have students draw a floor plan of their home, noting hazardous area.

Elicit parental cooperation to practise alternate fire routes in the home.

Safety in the Home (film).

Curriculum Guide for Elementary Health.

The Eyes Have It (film).
B. In the School

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: |  |  |
| Demonstrates increased awareness of dangerous situations which could occur in the school. | Demonstrate correct use of apparatus and tools and discuss dangers of misusing them. <br> Tour school building, noting areas requiring caution. <br> Invite resource person: Orientation and Mobility Instructor. | Playground Safety (film). |
| Demonstrates awareness of safety precautions taken during physical activities. | Tour school playground and locate safe play areas and unsafe play areas; stress caution and good sense. |  |
|  | Demonstrate and discuss the correct use of playground equipment. | ```Curriculum Guide for Elementary Health.``` |
|  | Discuss and establish rules for various games; discuss sportsmanship from the safety point of view. |  |

Level 4
C. In the Community

Demonstrates understanding of role of police and
firemen in case of disaster.

## The student:

Demonstrates increased awareness of the most common forms and causes of fire.

Demonstrates appropriate use of matches, etc.

Demonstrates knowledge of and practises fire prevention and fire safety.

Demonstrates ability to seek assistance from the public in case of a fire in a public building.

Discuss the proper use of fire and basic fire hazards.

Bring in guest speaker, e.g. from fire department.

Develop and complete a home fire hazard checklist.

Go on field trip to fire station.

Bring in fire fighter to explain how to use extinguishers and fire alarm boxes.

Demonstrate how fires may be smothered with thick cloth.

Practise alternate routes for fire drill.

Discuss purpose of smoke detectors.

Use role play.
Have a class discussion, emphasizing ways of informing the public of the student's handicap.

Teacher's Manual for Fire Prevention.

Curriculum Guide for Elementary Health.

TEACHING STRATEGIES
MATERIALS

Bring in guest speaker, e.g. member of safety patrol.

Demonstrates awareness of the role of the safety patrol.

Demonstrates ability to respond to traffic sights (partially sighted) and sounds to avoid danger.

Demonstrates appropriate behavior on the bus and in other vehicles.

Demonstrates ability to seek help from responsible adult if hurt, frightened or lost.

Demonstrates understanding of the importance of using seat belts.

Demonstrate correct way to load and unload school bus.

Practise use of emergency door.

Have a discussion about proper bus etiquette and respect for the driver's authority.

Discuss reasons to refuse rides with strangers and reasons to refuse to talk to strangers.

Discuss role of the Block Parent.

Bring in guest speaker, e.g. police, Block Parent.

Have a class discussion.
Invite guest speaker from Alberta Motor Association.

Alberta Safety Council, Elementary Material on Traffic Safety.

Curriculum Guide
for Elementary
Health.

Level 4
A. Specific and Allied Work Skills

## 1. Use of Tools and <br> Equipment

The student:

Selects and uses appropriate tools for a specific project.

Demonstrates ability to follow the rules of organization and care of tools and equipment.

With supervision, constructs more complex projects.

Demonstrates ability to follow safety procedures when using tools.

## 2. Following Directions

Demonstrates ability to follow more complex set of directions.

Go on field trip to hardware store to examine and select tools; to household department to examine and choose tools.

Give a recipe and have students, working in groups, collect all utensils needed to prepare it.

Choose a variety of projects within student's capabilities.

Have student choose one and complete.

Demonstrate and discuss storage of tools and equipment, e.g. vacuum cleaner, power tools.

Label storage areas, large print/braille where necessary.

Discuss possible hazards associated with tools in use and how to avoid injuries.

Give clear and concise verbal and written directions.

Industrial Arts for the Elementary Classroom.
Shop Safety. Films on use of tools. I.P.A. Manual, 1980. Young Homemakers' Series.

Kids in the Kitchen.
Cook and Learn.
A Special Picture Cookbook.

WORLD OF WORK
Level 4
A. Specific and Allied Work Skills.

Deal Me In.

Following Directions.

Discuss role and responsibility of foreman.

Invite guest speaker, e.g. construction personnel.

Do group projects: select one student to head group (foreman).

Have each student take this position in turn.

Have class discussion about acceptable work standards; have students judge samples of work and discuss ways to improve.

Show and discuss films about decision making.

Have student assist in library or school office.

Explain tasks before student goes and assess performance afterwards.

Demonstrates acceptance of supervision in specific work situations.
3. Decision Making

Demonstrates ability to make appropriate decisions in work situations.

## 4. Independence

Demonstrates ability to perform satisfactorily in unfamiliar work situations
Identifies person in authority in specific work situations.

- Independence

WORLD OF WORK
Level 4
B. Career Planning and Exploration

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

## 1. Why Work

The student:
Recognizes that people are paid for jobs.

Recognizes that people need money to purchase necessities.

Recognizes that finishing something makes one feel good (self-worth).

## 2. Job Awareness

Demonstrates awareness that people do different jobs: in home, in school, in community.

## 3. Job Demands

Demonstrates good work habits.

Demonstrates punctuality.

Carry out money raising projects for class and school.

Discuss basic necessities: food, clothing, shelter.

Play game: "When I grow up I would like to be ...".

Use role play of situations where good work habits are demanded.

Use simple contracts and awards and suggest goalsetting procedures.

Have student make own daily time chart.

Have class discussion about why routine is necessary.

The Career Workbook.

At Least A Thousand Things To Do.

Very Important
People Series.
Perhaps I'll Be ...
Series.
Kids Stuff, Children's
Program, CTV Productions.
Careers.
Jobs A to Z .

It's Positively Fun.
Courtesy in the
Community.
A Good Worker.
Unemployed Uglies.

Succeeding at Work.
Manners.
How to Get That Job. Making It On Your Own. Career Awareness Books.
Occupations 2.
Occupations L.

WORLD OF WORK
Level 4
B. Career Planning and Exploration

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

Recognizes own mistakes and corrects them.

Demonstrates good listening habits.

Communicates effectively with peers.

Assumes some responsibility for maintaining own belongings.

Follows school routines.

Have students follow an increasing number of instructions.

Play games unfamiliar to student; provide written or recorded instructions.

Have student complete simple tasks without close supervision.

Select class monitors.
Make a "Jobs for the Week" chart.

Encourage students to criticize their own completed tasks or jobs.

Check student's work and get him to suggest ways that work or work habits can be improved

Develop oral comprehension skills. Read story suitable for level and ask basic who, why, when, where, type questions.

Stories about Workers.
How to Hold Your Job.
Job Attitudes.
Perceptual Communications
Skills: Developing
Auditory Awareness,
Level 2.
Listen and Think
Cassette Series,
Levels $B$ and C.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :---: | :---: |

1. Awareness of Personal

Abilities and Interest
The student:
Recognizes that many vocations exist.

Distinguishes between fantasy and reality with regard to aspirations, planning for the future.

Identifies jobs, careers, which may be of special interest to him.

Demonstrates ability to describe own abilities and limitations for a specific job.

## 2. Awareness of Process

Demonstrates ability to use telephone when looking for information.

Demonstrates ability to take and leave messages.

Ask students to list and discuss jobs and careers.

Have a class discussion, e.g. blind cannot become a pilot, but could be computer programmer.

Use role play of various problems and social situations.

Use real telephone.
Have student assist in conveying messages to school personnel.

Have student deliver notes and newsletters home properly.
fo on field trip to A.G.T. Phone Store; discuss different models.

Sign-A-Mite.
Occupational Alphabet
Career Lot1.
Perhaps I'11 Be ...
Series.
Career Exploration Activity Cards for Fun. Canadian Classification and Dictionary of Occupations.

WORLD OF WORK
Level 4
C. Finding a Job

The student:
Develops awareness that people look for jobs.

Discuss where students might get part-time jobs.

Compile list of part-time jobs.

Discuss classified section of newspaper and the purpose of want ads.

WORLD OF WORK
Level 4
E. Worker's Rights

The student:

Demonstrates understanding of the concept of personal

100 Ways to Enhance self-worth and dignity.

Demonstrates understanding all people have rights.

| OBJECTIVES |
| :---: |
| 1. Care |
| The student: |
| Identifies and labels own clothing. |
| Undresses/dresses independently. |

See checklist on Dressing Skills in Appendix.

Discuss daily, weekly, seasonal, care.

Provide each student with own clothes hook with braille or print labels on hook and clothing.

Discuss what is special about one's own specific clothing. Show student how clothing can be identified by the size of buttons or zippers, texture, style of the collar.

Teach search techniques (information available from itinerant teachers/consultants).

Emphasize clear passageway, circular search pattern.

Invite resource person: rehabilitation teacher at C.N.I.B., to teach specific techniques for blind.

Place braille/large print labels on cleaning agents.

Invite resource person: rehabilitation teacher at
C.N.I.B., to offer suggestions.

## MATERIALS

A Step-by-Step Guide to Personal Management for Blind
Persons, 2nd edition.

Towards Independence. Social Competency.

Instructional Materials.

Towards Independence.

Lessons in Living.

TEACHING STRATEGIES
MATERIALS

## 2. Selection

The student:
Discusses and analyzes reasons for choosing clothing.

Chooses clothing suitable for work or leisure.

Demonstrates awareness of style, color, and design appropriate to individual.

Demonstrates awareness of need to choose appropriate accessories.

Identifies the appropriate store in which various items can be purchased.

## 3. Construction

Demonstrates ability to use simple sewing tools.

Sews simple items.

Have class discussion about comfort and quality of clothing.

Have class discussion about dress standards.

Use sighted guide where appropriate. Discuss suitability of newest fashion.

Go on field trips to department stores, speciality shops.

Go on field trips to shopping centers. Provide orientation and mobility training. Seek cooperation of parents in providing a wide variety of experiences.

Provide student with classroom experience with tools, stitchery projects and other craft work.

How You Look and Dress.

Braille tape measure. Clothing and Textile Education, Materials Directory, Trade News.

Set It Yourself.

TEACHING STRATEGIES

Discuss menu for which students are shopping and quantity of food needed. Go on field trip to store after compiling a grocery list.

Introduce a variety of exotic foods from each food group.

Contact Orientation and Mobility Instructor to provide assistance.

Discuss brand names and the effects of advertising on the consumer. Have student relate personal experiences.

Note: For specific techniques to develop skill in the use of the spoon, fork, knife etc. refer to books and articles listed in the materials section.

Provide experience in actual meal preparation, and eating; entertain other students and teachers in school.

Go on field trip to restaurant.

Look and Cook Series (6 kits).

Materials from Alberta Milk Foundation; Nutrition Communication.

Towards Independence. Social Competency.

Lessons in Living.

Towards Independence. Social Competency. Around America, A Cookbook for Young People.
Around the World in 80 Dishes.

HOME MANAGEMENT
Level 4
B. Food


## 5. Preserving

The student:

Describes the function of a refrigerator and freezer.

Handles food with care and cleanliness.

Demonstrates understanding of concept of perishables.

Stores food correctly.

## 6. Production

Identifies food sources.

TEACHING STRATEGIES

Demonstrate and discuss the function of each part of the refrigerator, e.g. vegetable crisper.

Provide experiments with perishable and non-perishable food storage. Chart results of experiments.

Demonstrate and discuss where specific foods should be stored.

Go on field trip to dairy, poultry farm, vegetable garden. Discuss production techniques for different types of food.

MATERIALS


HOME MANAGEMENT
Level 4
C. Maintaining the Home

## 1. Selection

The student:
Explains what is available in housing.

Demonstrates knowledge of the organization of rooms, and their purposes.
2. Furniture and Furnishings

Explains function of various furnishings.

## 3. Care and Maintenance

Demonstrates ability to keep own room clean.

Performs some household tasks.

Identifies daily and weekly cleaning routines.

Demonstrates ability to use some tools, e.g. screwdriver.

Makes simple repairs.

Go on field trips.
Have class discussion on single homes, condominiums, room and board, etc.

Have student evalute his own reaction to various types of housing.

Discuss renting vs. owning.
Have students discuss floor plans of own homes.

Go on field trip to furniture store. Have a discussion about unique furniture in student's home.

Have student assess home maintenance skills, and decide which skills he needs to learn to increase independence.

Have a discussion about ongoing classroom responsibilities.

Everyday Machines and How They Work.

Use class discussion on safety needs and care of children.

Invite guest speaker with young child to visit classroom.

Go on field trip to a day care center.

Babysitting Course available from community leagues.

Materials from
Y.M.C.A. and Police Department.

MONEY MANAGEMENT
Level 4
A. Earning Money

| OBJECTIVES |
| :--- |
| The student: |
| Identifies and arranges | paper money and coins.

Counts money, using coins and bills.

Brailles/writes money amounts of increasing complexity.

Transmits money amounts to calculator.

Recognizes coins and bills in combination.

MATERIALS

Use blind techniques for identification of money. Use itinerant teacher, resource person, Alberta Education Consultant.

Note: All blind and some partially sighted students need a sighted person to identify their bills for them. Once identification has been made the student should learn a basic system for folding money. It is generally best to leave dollar bills unfolded. The student should establish his own method for folding bills, e.g. fold lengthwise; fold in half width-wise. The easiest folding methods should be used for lesser denominations to make it more convenient for the student. The one denomination should always be folded the same way.

Use role playing: "Give me change for this $\$ 5.00^{\prime \prime}$.

Have students count actual money, spend according to classroom goals.

Give students problem to solve.

Have student name money, using coins and bills, sorting change. Go on trip to the store to make change.

Play games: match currency with name presented orally.

Money Makes Sense.
Money Matters.
Nemeth Code.

Speech + (plus)
(talking calculator).

The student:

Identifies jobs for which payment is made/is not made.

Recognizes that jobs must be completed to earn money.

Demonstrates understanding that the value of money changes over time, e.g. inflation.

TEACHING STRATEGIES

Have students sort and classify jobs: indoor/outdoor jobs, travel/non-travel, etc., "Jobs I like and jobs I dislike".

Have a discussion about community volunteers, "Why volunteer?".

List and discuss jobs done in class. Discuss why.

Obtain cooperation of parents; have allowance contingent upon completion of chores.

Compile a grocery list and have students note price changes over period of time.

MATERIALS

Good Cents, Every
Kid's Guide to
Making Money.
Pacemaker Practical
Arithmetic Series.

Department store materials.
Working Makes Sense.
B. Spending Money

Go on trips to local stores, garage, bank, dry cleaners, department store, shopping mall.

Play game, "Where would you buy a battery, shirt, etc.".

Have a discussion about the proper use of telephone directory information, newspapers, television. Have blind students use sighted guide.

Shop for materials and check receipt (for class projects).

Elicit parent support to encourage student to earn and budget money.

Use role play: travel agent, store clerk, customer; play using cash, cheque, C.O.D. or charge account.
(Budget (game).

Information available from Consumer and Corporate Affairs.

Buys items independently with correct amount of money, $11 s i n g ~ a ~ s i g h t e d ~$ guide if appropriate.

Recugnizes advertising techniques.

Demonstrates understanding that prices for familiar items vary from time to time.

Demonstrates understanding that services can be purchased.

Develops and utilizes a simple budget.

Recognizes that there are different methods of payment.

Uses coin operated machines (pay phone, vending machines).
C. Saving and Borrowing

Demonstrates understanding that borrowing may or may not be appropriate.

Have a class discussion.

Have students set a goal, earn and save for it using class bank account.

Have students record individual saving and spending.

Use role play, e.g. friend borrowing a dime.

Have a discussion about what would happen if it was not repayed.

Have a discussion about circumstances requiring borrowing.
A. Fundamentals of Movement

The student:

Continues to develop the abilities of Level 3.

## Gymnastics

Through participation demonstrates the basic skills associated with the following gymnastic themes:

- moves body from place to place in many ways;
- balances on, or suspends body from body parts;
- makes shapes while balancing or moving;
- keeps body symmetrical or asymmetrical when moving or balancing;
- twists and turns body when moving or balancing

TEACHING STRATEGIES

Note: Read the reference materials before proceeding.

Continue teaching the skills of Level 3; however, greater challenges should be provided to meet the increasing strength and body control the student is demonstrating. Use more complex apparatus arrangements, smaller balancing surfaces and more complex movement patterns.

No modifications are necessary Stress safety. The blind student should be given an area to work in which is familiar and safe.

MATERIALS

Elementary Physical
Education. Basic Movement Education for Children.

TEACHING STRATEGIES

## 1. Creative Dance

The student:
Demonstrates basic skills of creative dance by participating in lessons based on selected Laban Themes:

- Theme IV: Direct and flexible, bound and free-flow movement;
- Theme VIII: Activities of the whole body;
- Theme VII: Basic effort actions;
- Themes IV, V, XV: R elationship Themes.


## 2. Folk and Round Dances

Demonstrates basic steps such as, walk, two step, schottische, waltz, polka, pas-de-deux, grapevine, step-swing and balance.

Recognizes the ethnic differences between folk dance styles.

Participates in no-partner, couple, trio, line and circle dances.

Use more complex tasks to challenge the increase in body control; consider the greater intellectual and emotional growth of the student.

Expose students to dances which vary in nationality, number of dancers, basic steps.

Use dances classified as easy at this level.

Note: B1ind student should begin with partner dances, then as skills are learned progress to no-partner and group dances.

E1ementary Physical
Education.

Creative Dance in
Grades Four to Six.

Folk Dancing for Students and Teachers.

Dance Awhile (list of records and record shops, both U.S. and Canada).

## 3. Square Dance

The student:
Demonstrates basic square dance terms by participating in a variety of square dances.

## 4. Games

Participates in games which develop skills which are prerequisites or traditional dual and team sports.

## 5. Posture

Describes good posture and demonstrates proper body alignment.

## 6. Swimming

Participates in appropriate aquatics program.

Demonstrates yearly improvement following the Red Cross Water Safety Program.

Use simple square dances, e.g. "Oh Johnny", "Albama Jubilee", "Birdie in the Cage", and "Four Gent Star".

Substitute auditory or tactile cues for visual cues.

Have other students provide feedback to blind students by calling to them.

Use Yoga.

Have student participate in the Red Cross Water Safety badge program.

Dance Awhile.

Active Games for the Blind. Elementary Physical Education.
Auditory ball, Audible goal locators.
Movement Without Sight. Physical Education and Recreation for the Visually Handicapped. Games With a Purpose A Collection of 0 and M Games.

Movement Without Sight. Adapted Physical Education and Recreation.

Swimming for Children with Physical and Sensory Impairments.

Elementary Physical Education.
Swimming for the Handicapped.

MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES
Level 4
B. Games and Activities

TEACHING STRATEGIES*
MATERIALS

## 7. Track and Field

The student:
Participates in track and field activities.
8. Outdoor Pursuits

Participates in O.D.P.U. activities, e.g. camping, hiking.

## 9. Fitness

Participates in the CAPHER fitness program when it is done in his school.

Demonstrates improvement in all times.

Use music boxes for the shuttle run.

For 50 m . dash use the international system to guide the runner down to the end of the land, yell 4 if the runner is in mid-line, 3 if he is to the left, 5 if he is to the right.

For 100 m . run use a short running pole with a sighted runner holding one end.

Keep records of each student's performance to identify specific areas of weakness.

Canadian Fitness Awards.

The CAPHER Fitness Test. Kids Camping.
A. Music
"In the area of music, visually handicapped children - contrary to lay belief are not gifted merely as compensation for blindness." 1
"... of all the avenues of communication open to the blind child, music is one of the most significant and thus of incalculable value. ... His auditory and tactile senses permit him to relate to music as a listener or a performer, and these experiences afford him many opportunities to participate on an equal footing with his sighted peers." 2

The music curriculum for elementary schools developed by Alberta Education (1977) is suitable for use with visually impaired students. Since no music curriculum has been developed for either Junior or Senior High Schools, the visually impaired student should be integrated into the school's existing music program.

The following suggestions should be incorporated by the music teacher to assist her in successfully integrating the visually impaired student into her program.

## Rhythm Band

"Benefits derived from rhythm bands are the same for normally seeing as for visually handicapped students. However, teachers must assume responsibility for acquainting students with every instrument - the sound of it, how it feels in the hand - because otherwise each student will acquire only a limited knowledge about the instruments played by other students.

If the teacher points or gestures to indicate when students should or should not play, blind students will not receive such signals; therefore, teachers must adopt audible cues."

## Identification of Instruments

To facilitate recognition of tone quality, teachers should play instruments or use recordings, thus familiarizing the students with identifiable and characteristic sounds. Awareness that a voilin sounds like a voilin and not like a tuba is the lesson objective. A second step is to allow visually impaired students to handle and examine all the instruments. If the teacher plays a recording of a clarinet, students should have an opportunity to examine a real clarinet in class.

Instruments in a given family, e.g. strings, should be compared for sound, size, number of strings, position held when played, etc. Since experimentation is a channel for learning, the student might hold a string while it is being bowed and note the difference when he removes the finger. Also, differences between heavy and thin strings should be explored. How does the performer achieve legato and staccato effects?

Combinations of instruments can be introduced once the students have become acquainted with individual instruments. If live performers can be utilized, they might place themselves in various parts of the room so that the individual sounds can be more easily distinguished. In this exploratory stage, the human voice - alone and in combinations - should also be included. Having felt vibrations in other instruments, the students might feel vibrations in their throats and diaphragm.

## Music and Self-Expression

Self-expression to the accompaniment of music is desirable for all students. Blind students, however, may be limited in their experiences when required to depict certain behaviors, as when the teacher says: "Pretend you are a bear and walk like one", or "Make believe you are a daisy blowing in the breeze". Therefore, blind students must be shown how to perform the intended action. The teacher might try to draw out ideas rather than impose them. She might say: "Listen to the music, and then make your feed do what the music seems to say", or "What do you think your arms want to do with this kind of music?". Under these conditions, visually impaired students experience no disadvantage.

Some blind students are reluctant to move out or do so only awkwardly or fearfully. Because of this, teachers might request them to "act out the music" right where they are. If students learn enough freedom and confidence while staying in one place, they may learn, though belated, how to move in an enlarged area.

Music and Dance (Eurhythmics)
Eurhythmics involves following a prescribed pattern imposed by the teacher or choreographer. Students learn to coordinate body parts and work toward independence of separate members. Eurhythmics yields gains in muscular control and coordination, grace, poise, and self-confidence. However, more modern methods of rhythmical gymnastics give greater freedom of movement, encourage more self-expression through body movements.

## Music Notation in Braille and Large Print

If sighted students are expected to read music notation on the staff at a given grade level, partially sighted students at that time should also have such competence in enlarged form. Teachers can use either specially prepared sheets with the enlarged staff adding notation by hand, or can purchase ready made enlarged sheet music if the desired title is available (see Note).

Occasionally a given community may have a sighted music teacher who knows braille music notation or a blind teacher of music with whom the student and his family might arrange private lessons for both notation and performance.

Visually impaired students，their parents，and their teachers must not jump to conclusions that careers in music are guaranteed and automatic．Frequently the presence of musical talent is overestimated．Interest and enjoyment are not enough to launch a career．Countless hours of arduous and lonely practice are imperative．

Visually impaired students in music have one of three choices if contemplating a musical career：

1．Serious music based on use of notation and exactly prescribed performances．
2．Popular music，which calls for the development of a personal style distinctive from that of other performers．If the visually impaired musician has a good ear for reproducing what he hears in live or recorded performances，he may have little or no need for notation itself．

3．Teaching music，which is similar to choice $⿰ ⿰ 三 丨 ⿰ 丨 三 ⿻ ⿻ 一 𠃋 十 一 口 儿, ~ t h o u g h ~ i t ~ d o e s ~ n o t ~ d e m a n d ~$ performance in concerts．

The student using braille notation must memorize it before being able to play it． This consumes much time and restricts the performer＇s repertory．Unlike a sighted person，who can do a reasonably accurate job even on his first exposure to a musical composition，the braille reader cannot＂sight read＂music．Partially sighted students have similar difficulties．Because of their visual problem，they may not be able to read quickly enough to read and play simultaneously；so they may have to memorize also．Furthermore，the partially sighted may need to use a specia music rack that brings the sheet close to the face so that it can be read．

It is hoped that the persistent will sell themselves on the quality of their musicianship and not on their blindness．

## Attending Professional Concerts

Although attending live performances has the same values for both visually impaired and their sighted peers，one difference lays in the inability of the former to read program notes distributed to the audience．There may not be sufficient time before the performance to allow a sighted person to read in whispers．Without these notes， the listener misses vital information pertaining to historical setting or analysis of art form．To correct this problem，teachers might secure advance copies of the program－often advertised in newspapers－and then play the same compositions at school，discussing pertinent information．A culminating experience might involve listening again to the same compositions after the concert and sharing reactions to the live performance．

## Group Participation（Chorus，Orchestra，and Band）

Visually impaired students should be encouraged to assume active memberships in school organizations devoted to music．This type of integration with sighted peers may result in lasting friendships beyond the school year，in vocational channels （Bevan，1965）and in keys that unlock social doors making possible broader inter－ personal relationships．Some modifications are necessary，as outlined in the fol－ lowing paragraphs．

Processions and Recessions: Moving in straight lines equidistant from those in front and behind is important for aesthetic effects. If a blind student is paired with a sighted partner, they might link little fingers of adjoining hands in an inconspicuous way. An understanding teacher might have students proceed by twos instead of in single file when a blind student is a member of the group. When required to go in single file, a blind student might use a thin string held taut by the student preceding and following him with the string wrapped around his own finger halfway between the two. Being confronted with new territory poses the problem for blind students of not knowing distances or turns or the presence of steps, since rehearsals may be conducted in one place while the public performance is held elsewhere. If possible, arrangements should be made to take the blind student to the new site in order to orient him to it.

Marching Band: Partially sighted students may succeed as participants in a marching band, whereas blind students might find it extremely difficult to keep in line while marching and playing. However, blind students should be permitted to try doing it in rehearsals. Perhaps blind students can orient to a particular sound preceding them, such as a drum or flute.

Pairing with Partner: In chorus, band, or orchestra, visually handicapped students might be placed beside a capable musician singing or playing the same part. Such partners can serve as examples to emulate. In rehearsals, blind students can listen part of the time and later sing or play when the material has become familiar. The pair might work at times other than during rehearsals with the sighted performer playing or singing the part for the other to listen to and learn. When several persons make up a given section (such as tenors), the blind student should be seated in the front of the group so that more of the sound of his part reaches him.

Use of Recordings: If a student group is practising a given composition already reco-ded by another group and with the same arrangement, visually handicapped studerts might be assigned to study by listening repeatedly to that recording. Furthermore, the Division for the Blind and Physically Handicapped, Library of Congress, is producing kits containing sound recordings with music in usual renditions, also at a slow rate for study purposes, with solos unaccompanied, and with notation in both braille and large type. These materials can be of utmost value if the teacher's selection and the titles thus made available coincide.

Signaling: Music teachers who are not accustomed to having a visually handicapped student in the group may need to modify their signaling procedures. A nod or hand gesture will not be noted by him. Instead, a code of raps with the baton on the music stand might be devised.

Blind Soloist and Accompanist: Although use of the voice may be correct, blind soloists may need assistance with stance, facial expression, and gestures. If the soloist is blind, he can usually take his cue from the accompanist and the musical introduction, if there is one. If the accompanist is blind, he must be certain that the soloist is ready before beginning the introduction." 3
Note: The Materials Resource Centre, Department of Education, Alberta, has enlarged the sheet music available to Elementary Music teachers as part of the Edmonton Public School Board Music Curriculum. A teacher requiring music in large print should contact the itinerant teachers or provincial consultants for the visually impaired.
"Frequently only the words of a song need to be brailled. In fact, often memorization will suffice and no brailling is necessary." 4

1
Music for Visually Handicapped Children, Napier, Grace. The Visually Handicapped Child in the School.
2
The Importance of Music in the Life of a Visually Handicapped Child, Toodenough, Forrest and Dorothy. Education of the Visually Handicapped, $\mathrm{V}_{2} \mathrm{~N}_{1}, \mathrm{p} .28$, March, 1970.
3 Music for Visually Handicapped Children, Napier, Grace. The Visually Handicapped Child in the School.
4 Your School Includes a Blind Student, Willoughby, D., Lansing, S., Barber, M., Maurer, P. National Federation of the Blind Teachers Division, p. 18.

## B. Art

## INTRODUCTION

"A blind student can learn basic art concepts and create art projects in the same manner as a sighted child. His blindness does not make it impossible for him to learn the ideas of art or to participate in art activities.

The basic goals of teaching art to a blind child are the same as for a sighted child: to improve the child's ability to handle basic materials, such as scissors, glue, paper, and crayon; to develop an understanding of the elements and principles of design, to teach him the basic vocabulary of art; to make him aware that there are various ways to approach an art project; and to stimulate him to think creatively. " 1

The following suggestions should be incorporated by the art teacher to assist her in successfully integrating the visually impaired student into her classroom:
"Blind children need to know where their materials are. Prepare a tray or box for each blind child with all the necessary materials before each activity.

A sighted partner is of great assistance to the blind child who may not yet have developed the skills of cutting, knot tying, pasting or taping. The sighted partner is also essential for providing feedback to the blind child. For example, in the tie dyeing activity the sighted partner describes the designs made by the dyes.

Blind children may need a little extra time to complete the art activity.
Blind children "see" with their fingers. Provide dampened paper towels for the child when an activity involves paste, clay, plaster, or papier mache. Sticky fingers find it hard to manipulate materials.

Blind children must be warned not to touch their brailled watches unless their hands are clean.

Blind children should be involved in all demonstrations.
Brailled instruction sheets should be prepared for blind children listing steps of new techniques such as printing, papier mache, weaving.

Blind children should have access to models and objects used in the science activity during the art session. For example, the blind child needs to have contact with a model of the fish while creating a plaster fish, or models of the stages of life cycles when asked to create clay expressions of the life cycle.

A screen board can be used by blind children to create linear designs. The screen board is simply a wooden frame with screening attached tautly and securely over the open area. By placing a piece of paper over the screen and rubbing it with a crayon, a textured crayon design results.

The art work produced by blind children reflects very personal expression of a mental image not influenced by vision of the art work of other children. Encourage this personal expression. It is art in its purest form. " 2

1
Article: "Teaching Art to the Blind Child Integrated with Sighted Children", by Collien Freund. The New OUtlook, p. 205.

2
Laboratory Science and Art for Blind, Deaf and Emotionally Disturbed Children, A Mainstreaming Approach, Doris E. Hadary, Ph. D., and Susan Hadary Cohen, M.A., University Park Press, Baltimore, Maryland, 1978.

## OBJECTIVES

## TEACHING STRATEGIES

No adaptations needed for the partially sighted. Have blind use different substances in which to dip stick, e.g. white glue, to enable them to feel their lines; use foil paper.

No adaptations needed for partially sighted. Paint should be textures and surfaces should be varied, e.g. relief, for blind.

Give blind and partially sighted students the freedom to explore a variety of models tactually. Offer modelling, sculpting and constructing activities in some form, utilizing a variety of materials.

Do relief painting: with natural or found objects, from prepared surfaces, from carved surfaces; stencil printingspray paint, silk screen, sponge; planographic printingrubbings, monoprints, finger painting; itaglio printing crayon etching, scratchboard.

Provide experiences in the following:

- fabric making: knotting, knitting, braiding, weaving;
- fabric decoration: stitchery, applique, batiking.


## MATERIALS

Elementary Art
Curriculum Guide.
Ways of Seeing, Area 1: Introducing Ways of Seeing.
Creative Drawing:
Ideas, Materials
and Techniques.
Creative Drawing:
Point and Line.

Exploring With Paint.

Art from Scrap.
Creative Clay
Design.

Creative Printmaking. I Can Make A Rainbow.

Stitchery: Art and Craft.
Creative Textile Design.
Creative Arts and
Crafts.
The Rainy Day Book.

## MATERIALS

The student:
Demonstrates relaxation, concentration and trust of self and another.

Demonstrates body movement in a variety of situations (non-directed).

Identifies environmental stimuli to the senses.

Demonstrates ability to communicate sensory experiences.

Demonstrates ability to use imagination to help improve characterization.

Demonstrates increased ability to communicate verbally and non-verbally.

Communicates meaning by altering voice and speech patterns.

Demonstrates knowledge of what creates a character, e.g. actions, appearance.

Use activities to practise control of body parts so that students become aware of the many ways the various parts of their bodies can move.

Use activities based on all aspects of movement, e.g. control, tension, relaxation, rhythm and co-ordination and different types and rates of movement.

Use dance drama.
Use appropriate classroom activities such as field trips.

Use imaginative physical exercises and speech exercises Use improvisation, mime/ pantomime, puppetry.

Use exercises to develop interesting speech patterns; vary volume, pitch, rate, tone, and pause of voice.

Describe the character; focus on personality type, character idiosyncrasies, motives, etc.

Drama - A Curriculum Guide for Developmental Drama in the Elementary School.

Development Through Drama.

Speaking/Drama.
Language Arts Services. Drama as a Learning Medium.
Educational Drama for
Six to Twelve Year Olds. Creative Dramatics and Art for Children.

Creative Drama in the Elementary
School.

Speaking/Drama, Language Arts Service.

Teaching With Creative Dramatics.
Play Acting in the Schools.
C. Drama

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: |  |  |
| - | Use role play to develop characterizations, e.g. moving, speaking, feeling and thinking like the person portrayed. <br> Use improvisation. |  |
| Demonstrates ability to give speech or language to major characters. | Use puppetry, improvisation, plays. | Creative Dramatics and English Teaching. |
| Demonstrates understanding of the story sequence/plot. |  |  |
| Demonstrates awareness of the various media enjoyed by our society. |  |  |

D. Leisure Time Activities

All of the activities recommended for Level 3 are appropriate for students at Level 4. Additional activities for students at this level include: Chess, Cribbage, Hearts, Clue, Sorry, Yahtzee, Scrabble. Card and dice games played by students of this level can be shared by the visually impaired student using large print or braille cards and embossed dice.

The list of active recreational pursuits listed in Level 3 should be expanded by adding the following: wrestling, camping, social dancing, sledding/tobogganing.

Socializing activities which are appropriate include: movies, plays, concerts, shopping, dining out.

The recommended references listed in Level 3 are appropriate for Level 4.

| OBJECTIVES |  | TEACHING STRATEGIES |
| :--- | :--- | :--- |
| The student: |  |  |
| Identifies various types |  |  |
| of family units. |  |  |

The student:
Identifies classmates and majority of staff members with whom he deals by name or by role.

Accepts responsibility for personal and public property.

Demonstrates respect for the personal property of others within the school.

Participates in decisions regarding rules.

Identifies privileges and consequences associated with school rules and routines.

Accepts responsibility for own behavior and duties appropriate to age.

Responds to authority in the school and demonstrates understanding of the need for authority figures.

Encourage blind children to identify classmates from appropriate verbal clues.

Take school tour in September to meet new personnel.

Have a class discussion about appropriate behavior.

Man and His Family, Units 5 and 6.

| OBJECTIVES |
| :--- |
| The student: |
| Defines a community and <br> identifies its leadership. |

Identifies common city or town facilities.

Identifies a wide range of helping professions.

Demonstrates awareness of how authority is obtained.

Demonstrates understanding that all individuals are members of communities, with community rights and responsibilities.

States the name of his town or city, province, community, country and continent.

Demonstrates increasing understanding of what constitutes a town, a city, a province and a country.

Identifies and explains the symbolism in the Canadian Flag and National Anthem.

Demonstrates awareness of cultural differneces within own city or town.

Identifies the role of civic leaders.

TEACHING STRATEGIES
MATERIALS

Man and His Communities.

Go on field trip to a local recreation facility.

Have a class discussion about how authority is earned, delegated, assumed or inherited.

Neighborhood and Community, Social and Environmental Study Series Program.
C. Community and Country

The student:
Demonstrates awareness of city or town rules and laws.

Bring in guest speakers, e.g. policeman, firefighter.

Discuss rights and responsibilities of pedestrian.

Level 4
D. Current Events

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| The student: <br> Demonstrates ability to <br> select a major radio, <br> television newscast or <br> press report. | See Social Studies Curriculum. <br> Have guided discussion of <br> major news stories. <br> Simulate the function of the <br> media (class or school news- <br> paper). |  |
| Recalls daily news and <br> weather forecast. <br> Identifies major news <br> stories. | Have students plan a field <br> trip to a local newspaper. <br> Simulate newspaper functions <br> with class reporters, editors. | Learning from Newspapers. |

## 1. Ecology

The student:

Classifies related species.

Classifies plant material on two or more dimensions.

Identifies basic requirements necessary for growth of living organisms.

Demonstrates some knowledge of laws dealing with animal care, e.g. pet licensing.

Cemonstrates increasing awareness that parks are conservation areas.

Recognizes the positive/ negative effects of man's intervention in nature.

Assumes responsibility for the care of a living organism.
2. Natural Phenomena

Predicts weather from sky conditions/descriptions.

States characteristics of each season.

States how weather affects the life of others, e.g. farmer.

## 3. Energy

Demonstrates knowledge of alternate energy sources, e.g. wood burning fireplaces, solar heating.

Level 4
E. Environmental Education

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

The student:

Demonstrates awareness that the energy used to heat his home and provide other utilities costs money.

## 4. Pollution

Demonstrates awareness of a variety of environmental considerations, e.g. while walking, riding various vehicles.

Recognizes importance of pollution control laws, including noise pollution.

Ask students to discuss the cost of electricity and other utilities with their parents.

Have student prepare a list of environmental features to watch for on his next car ride (pollution bingo.).
Include:

- litter barrel
- no loitering sign
- a very noisy truck or car
- a campbround garbage can, etc.

Have a class picnic at a nearby park or roadside campground. While at the site teach student the basics of good use of the facilities, e.g. leave the ground unlittered, replace the wood supply, no cutting of wiener sticks, proper toilet practices.

Go on field trip to airport and discuss pollution resulting from air travel.

Energy Conservation
Cut-outs.
Utility and Gas Bills.
E. Environmental Education

## OBJECTIVES

TEACHING STRATEGIES

Discuss that, in a city, the removal of man's waste materials is carried out by special people and special equipment or systems.

Selects one field of work that is related to pollution control.

Identifies sources of excessive noise within the environment.

## 5. Conservation

Saves recyclable materials and returns to appropriate place.

Demonstrates knowledge that conservation through wise use saves money.

Demonstrates knowledge that proper insulation in a home can save on fuel costs but may require an initial expense.

Demonstrates knowledge and appreciation for the use of energy saving modes of travel, e.g. bicycle, public transport, walking.

Have student make a small poster to remind people at home to turn out the lights when leaving a room.

At home, have the student monitor the thermostat to ensure that it is turned lower at night when the family sleeps.

Have student examine the insulation used in his attic and explain how it saves heat loss just as a blanket on the bed keeps him warm.

Have a class discussion about the concept of a car-pool to show the need for different attitudes on the part of our citizens in regard to energy consumption.

MATERIALS

Living Well in Times of Scarcity.

Sample insulation materials.

Demonstrates safe use of everyday outdoor tools and chemicals.

Demonstrates knowledge of water safety rules.

Demoristrates knowledge of fire prevention methods.

Practises safety rules that apply to the outdoors.

Recognizes people in positions of authority in parks, campsites, and public outdoor centers, and demonstrates awareness of their ability to help in emergencies.

Demonstrates a basic awareness of first aid for minor injuries, e.g. nettles, insect stings, small cuts, minor burns.

Demonstrates ability to go to appropriate locations if caught in inclement or potentially dangerous weather.

\section*{| 4 |
| :--- |
|  |}

A. Knowledge of Self

OBITECTIVES

1. Personal Characteristics Self Identification

The student:
Identifies significant public figures and the office held (mayor, Premier).

Identifies self from dessciptions by others with regard to physical characteristics and behavioral characteristics.

Identifies or describes an increasing number of interests or preferences, abilities or talents.

Recognizes and accepts physical limitations and the range of differences between individuals.

Recognizes ways in which people vary in areas of strength, weakness, interests.

## 2. Physical Self

Interprets and categorizes sensory input with increasing ability.

Identifies physical changes resulting from growth and development.

TEACHING STRATEGIES

Have class discussion.

Develop braille family tree.

Read published biographies.
Have student write biography.

Expose students to a wide variety of experiences, and people with whom to discuss interests.

Bring in guest speakers.

List sounds and smells that warn people to be careful.

Bring in appropriate guest speaker, e.g. senior citizen.

Discuss appropriate books.
Point out universality of physical changes, and discuss the various aspects,
e.g. height, weight, voice change.

MATERIALS

The Family You Belong To.

Innerchange.

All About You. Understanding Yourself.

Braille Representation of Sexual Organs.

Sex Education and Family Life for Visually Handicapped Children and Youth: A Resource Guide.

All About You. Girls and Sex. Understanding Yourself. Youth and Sex: Pleasure and Responsibility.

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

The student:
Recognizes that physical differences may affect occupational and personal choices.

Identifies physical sex changes and feelings arising from awareness of sexuality.

## 3. Emotional Self

Identifies increasing number of emotions in self and others with some accuracy.

Recognizes mixed emotions or changing emotions.

Distinguishes degrees of emotion (pleasant, ecstatic).

Demonstrates increasing awareness of causes of emotions and consequences of emotional reactions.

Recognizes the relationship between emotion and behavior.

Have class discussion, e.g. blind cannot pilot planes but can be computer operators.

Use strategies in "Perspectives for Living".

Use role playing and class discussion.

Use strategies in "Perspectives for Living".

## Lifeline.

Becoming a Good Leader.

Braille models. Love and Sex in Plain Language. Innerchange.

Exploring Your Values.

Exploring Your
Personality.
Looking Ahead to
Marriage.
How to Increase Your Self-Confidence.
All About You. Growing Up Emotionally. Understanding Yourself.

The student:
Recognizes and categorizes the causes of stress in self and others, e.g. threat conflict, frustration.

Identifies and discusses appropriate ways of dealing with stress.

Demonstrates ability to cope with stress.

Expresses emotions appropriately with regard to situation, intensity, relationship.

Controls various emotions in a variety of settings.

Recognizes and avoids potentially provoking situations (in familiar surroundings).

Responds appropriately to provoking situations.

Today's Teen
Series.
Innerchange Units 28 and 30.

Innerchange Units 2 , 17, 25 and 29.
Your Problems and How to Handle Them. Making and Keeping Friends.

TEACHING STRATEGIES

## 1. Needs and Motivations

The student:
Identifies human needs which are physical and those which are emotional.

Identifies basic needs of safety, belonging and adequacy.

Identifies how basic needs can be provided for.

Recognizes the relationship between behavior and needs or motives.

Identifies an increasing number of situations in which people need help, (alone, left out, failure, rejected).

Identifies sources of help including family, school, community, health and mental health personnel.

Have class discussion about advertising influence on needs and wants.

Have students tape record collection of favorite radio and television commercials to analyze.

Have class discussion to show that individuals have different needs.

Use role play, appropriate stories.

Hold classroom meeting.

## Values Clarifications.

Inner Change.
Schools Without Failure.
understanding self and getting along with others
Level 5
B. Social Relationships

| OBJECTIVES |
| :---: |
| 2. $\frac{\text { Factors Affecting }}{\text { Relationships }}$ |

The student:
Recognizes that age and status differences affect the ways in which people relate to one another.

Indicates how age and status differences affect relationships, e.g. child to adult, child to child, adult to adult.

Recognizes that the degree of familiarity affects the ways in which people relate to one another.

Recognizes that sex affects the ways in which people relate to one another.
3. Handling Social

Interaction
a) Expressive Communication Skills

Demonstrates increased skill in communicating with others.

Use role play, class discussion, books, films.

MATERIALS

About Brothers
and Sisters.

The Family You Belong To.
How to Get Along With Others.
Growing Up Socially.
How to Live With Parents.

Use directed discussion: "My mom lets me ...", "The teacher lets me ...".

Discuss dating, appropriate behavior, basis for dating.

Getting Along With Parents. How to Talk Better. Understanding Dating Relationships.

Innerchange, Units 37 and 38. Family Life.
You.
Today's Teen Series:
Discovering You;
Decision Making;
Relations to Others.
Dimensions for Living.
Activities for
Developing Self
Awareness.
Lifeline Materials Girls and Sex.

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

The student:
Communicates effectively in small groups.

Participates in more formal
types of communication (debate, discussion, meetings, interviews).

Recognizes and uses appropriate speech in social situations.

Identifies and deals with blocks to communication in self and others.

Checks out whether communication was received as intended.

Communicates a wide range of feelings with increasing accuracy.
b) Receptive Communication Skills

Listens/attends to increasingly complex instructions with comprehension.

Demonstrates ability to use different types of listening for different purposes (passive, analytical).

Separates fact and opinion.
Identifies possible feelings of speaker and lists behavior which supports these assumptions.

Discuss the effects of the following blocks: put downs, dominations, judgement, interruption, blaming, irrelevant comments.

Give guidelines, number of directions.

Check frequently to make sure directions are understood.

Demonstrate appropriate methods.

Getting Along With Parents.

How to Get Along With Others.

How to Talk Better. Dating Tips for Teens. Getting Along With Others.

Dating Tips for Teens.

UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
Level 5
B. Social Relationships

| OBJECTIVES |
| :---: |
| c) $\frac{\text { Problem Solving and }}{\text { Decision Making }}$ |

The student:

Demonstrates understanding of the terms: problems, decision, consequences, solution.

Demonstrates the steps of problem solving new and personal experiences with minimal supervision.

Demonstrates knowledge that accurate and complete information aids in appropriate decision making.

Collects information relerant to the decision being made.

Demonstrates ability to evaluate most appropriate solution.

Demonstrates increased awareness of how problems are caused.

Demonstrates increasing ability to apply constructive conflict management techniques with increasing independence.

## 4. Rules and Routines

Identifies rules of behavior in a variety of familiar situations (field trips, parties, sports activities).

TEACHING STRATEGIES

Use appropriate stories leading to class discussion.

Use role play.

Discuss cause and effect relationship.

Use incomplete stories. Discuss compromising, threat free explanation, distracting, abandoning, exaggerating, humor.

Parent Effectiveness Training.
Teacher Effectiveness Training.

Have a class discussion.

How to Get Along With Others.
Getting Along With
Others.
Lifeline.
-

MATERIALS

UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS Level 5
B. Social Relationships

The student:

Follows rules of appropriate behavior in a variety of familiar situations.

Identifies the potential consequences of breaking rules in a variety of familiar situations.

Formulates routines/rules for familiar situations and identifies consequences.

Identifies ways in which rules made by others may be modified, e.g. voting.

Recognizes that special rules govern orientation and mobility for visually impaired students.
5. Social Roles

Identifies roles associated with the community and states some of the characteristics of these roles.

Recognizes the difference between official and unofficial roles, e.g. friend vs. president.

Recognizes the privileges and obligations associated with a variety of roles, e.g. student/teacher, child/parent.

## MATERIALS

Emily Post Book of Etiquette for Young People. Esquire Guide to Modern Etiquette. Manners Made Easy.

Choose class executive; form a mini society with own rules to be established by democratic process.

Go on field trips into community.

Bring in appropriate classroom visitors.

Have a class discussion about various roles, e.g. adult, child, girlfriend, customer, various work related roles.

Schools Without Failure.

The student:

Recognizes that a given person may assume several roles at the same time, e.g. student, cub leader, child.
6. Values and Social Expectations

Behaves appropriately in all social situations.

Demonstrates understanding of the relationship between social customs and values.

Determines a person's values from his goals, interestis, attitudes, feelings. activities, etc.

Demonstrates increasing awareness of personal values by stating what they would do in a given situation and why.

Recognizes some alternative behaviors which others might engage in the same situation, e.g. have a date but no money.

Demonstrates understanding of the relationship between moral values and laws, e.g. justice, freedom, equality, responsibility.

Demonstrates understanding of need for protection of self and property.

Demonstrates understanding of simple legal consequences.

Have student talk to relatives and friend and report back to class.

Invite guest speaker.
Have a class discussion.

Sex: Telling It Straight.

## OBJECTIVES

The student:
Demonstrates increased understanding of the four basic food groups.

Demonstrates understanding of the role of nutrients for growth, health and energy.

Demonstrates understanding of the importance of a proper diet.

Demonstrates understanding of the relationships between nutrition, fatigue illness and growth.

Demonstrates awareness that eating places must meet health standards.

TEACHING STRATEGIES

Have a class discussion about importance and nutritional value, following Canada Food Guide.

Discuss the calorie intake chart.

Have student keep a record of daily calorie intake and discuss.

Invite guest speaker, e.g. dietician, nutritionist.

Discuss the dangers of unsupervised dieting, the difference between fattening and non-fattening food.

Discuss symptoms of nutritional deficiencies, e.g. rickets.

Examine wrappers and cartons to determine the nutritional value of the contents.

Invite guest speakers, e.g. from Department of Health, and discuss standards required.

Have student prepare reports on diseases which can be spread by food,
e.g. botulism.

## MATERIALS

Canada Food Guide.
Curriculum Guide for Junior High School Health.
Food Facts for Young People.

Materials from Weight Watchers.
How a Hamburger Runs Into You (film). You and Your Food. Food Fads and Facts. Diet for a Small Planet (film).

Food and Your Weight.

Teaching Resources for Secondary School Home Economics.
100 Delicious Ways to Stay Slim.

Battling Disease.
Protecting Your Health.
Homemaking for
Teenagers.
Teen Guide to Homemaking.
Weight Watchers of Alberta.

TEACHING STRATEGIES
MATERIALS

## 1. Knowledge of Body

The student:
Names major body organs.

Recognizes adolescent growth processes.

## 2. Care of Body

Demoristrates principles of good grooming in daily life.

Assumes increasing responsibility for care of personal belongings, e.g. grooming articles.

Recognizes need for varied activities (work, recreation, rest and relaxation) to maintain good health.

Practises physical fitness program.

Invite or have student interview: dentist, skin doctor, general practitioner, nurse,
dental hygienist and cosmetogeneral practitioner, nurse,
dental hygienist and cosmetologist, concerning fact and information.
Introduce the anatomical characteristics of males and females.

Have a class discussion.

Have student individually assess his own life for balance of work, recreation and rest, and suggest appropriate changes to implement.

Have student interview or invite Y.W.C.A. personnel, a noted athlete or sportsman (woman), successful career person.

You're Maturing Now. All About the Human Body. Human Growth.
Sex Education for the Visually Handicapped in Schools and Agencies (selected papers).

Sex Education and Family Life for Visually Handicapped Children and Youth, A Resource Guide. Braille Representation of Sexual Organs.

Homemaking for
Teenagers.
Values for Health.
You and Your Health.
Facts about Veneral Disease.
A Teenage Guide to Healthy Skin and Hair.
V.D.: Facts You

Should Know.
V.D.: The ABC's.
V.D.: Kids Can

Get It, Too.

The student:
Recognizes appropriate time to seek medical attention.

Demonstrates knowledge of how and when to administer first aid for minor accidents.

## 3. Drugs and Alcohol

Distinguishes between prescription and nonprescription drugs.

Recognizes that some over-the-counter medications contain drugs.

Recognizes the physical effects of drug abuse.

TEACHING STRATEGIES

Have a class discussion.
Invite guest speaker from Red Cross, school nurse, St.
John's Ambulance.
Provide opportunity to participate in first aid course.

Have student discuss personal experiences.

Invite guest speaker from Alberta Alcohol and Drug Abuse Commission, school nurse, pharmacist, doctor.

Have a class discussion on the effects of different drugs on the body.

Stress importance of taking medication as prescribed.

## MATERIALS

Smoking: Your Choice Between Life and Death. Facts About Alcohol.
LSD - Insight or Insanity;
Smoke Screen;
Smoking, Its' Your Choice;
This Way to Safety;
Where There's Smoke;
Dawning;
Alcohol: Our No. 1
Drug (films).
What You Should
Know About Drugs.
Youth and the
Drug Problem.
About Drugs.
Facts About Smoking and Health.
To Smoke or Not
to Smoke;
Tobacco, Alcohol and
Your Health (filmstrips).
Facing the Facts: Drugs,
Alcohol and Tobacco.
S.R.A. Guidance Series.

Facts About Narcotics and Dangerous Drugs.
Drugs: Facts on Their
Use and Abuse.

# C. Community Health Services 

A. In the Home

TEACHING STRATEGIES

## MATERIALS

Have student research and report on the incidence and causes of home accidents, the losses involved, and effective methods of controlling or avoiding home hazards.

Using the most recent available statistics have students report on the number of accidents that occur at each age level.

Through group discussion prepare a set of standards which will aid in the prevention of home accidents.

Discuss reasons some people seem more accident prone than others, e.g. nervous tension, carelessness, etc.

Discuss great cost and loss of time due to accidents.

Discuss common causes of fire.

Discuss the procedure that should be followed in the event of fire in the home.

List useful fire fighting equipment that should be kept in the home.

Bring in guest speaker, e.g. from fire department.

Your Family's Safety, Keep Them Safe, Safety in the Home (films).

Curriculum Guide for Junior High School Health.

Smartest Kid in Town (Film).

Fire Safety is Your Problem (film).
B. In the School

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

The student:
Demonstrates knowledge of common accidents which could occur in the school.

Follows safety procedures during physical activities.

Have a class discussion about the chief causes of accidents in the school grounds.

Have students research and report the proportion of accidents that occur at school, at home and on the way to and from school.

Discuss what the students can do to control the hazards involved.

Have student groups plan a study of school accidents to determine their location, the type of activity and the causes.

Have students list popular recreational activities and study accident survey reports on these activities.

Discuss why some people are more accident prone than others, e.g. the show off, the overly cautious.

Have class discussion of the safety measures which should be observed in an outdoor activity, e.g. camping, hiking, winter activities.

Bring in guest speakers to discuss their swimming and water safety program, e.g. Red Cross Society, Y.M.C.A.

Curriculum Guide for Junior High School
Health.

Danger is Your Companion;
Play it Safe;
Look Alert - Stay
Unhurt;
Safety Adventure Out
of Doors;
Water Safety;
No Time to Spare;
How to Avoid Muscle Strains (films).

SAFETY
Level 5
C. In the Community

The student:
Demonstrates understanding
how to cooperate with
authorities in case of disaster.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| The student: <br> Demonstrates knowledge of <br> and practises fire pre- <br> vention and fire safety. | Discuss the procedure that <br> should be followed in the <br> event of fire in the school. | Bring in fire fighter to <br> discuss inspection, main- <br> tenance and use of fire <br> extinguishers. |
| Discuss use and maintenance <br> of smoke detectors. | Teach alternate routes for <br> evacuation of school. | Use role play and class <br> discussion, emphasizing ways <br> of informing the public or <br> the student's handicap. |

The student:

Demonstrates knowledge of and ability to use appropriate emergency numbers.

Demonstrates understanding of the importance of using safety equipment in vehicles.

Discuss the necessity of wearing seatbelts and helmets on motorcycles and bicycles.

WORLD OF WORK
Level 5
A. Specific and Allied Work Skills

## 1. Use of Tools and

 EquipmentThe student:
Demonstrates ability to choose and use appropriate tools and equipment for a specific project.

Demonstrates ability to organize and care for tools and equipment.

Demonstrates ability to construct more complex projec.s.

Demonstrates ability to follow safety procedures when using tools and equipment.

Have a class discussion and demonstrate the use of unfamiliar tools and equipment.

NOTE: It is essential that the visually impaired student receive one-to-one hands-on instruction, initially.

Explain storage procedures.
Use large print or braille labels where required.

Have each student use equipment while monitoring his proficiency.

Assign projects which require the use of more complex equipment.

Discuss the necessity of Safety Shields when using power driven tools and equipment.

Discuss absolute necessity for listening carefully to the directions; concentrating on the task at hand, when using power driven tools and equipment.

Invite guest speaker: Industrial Safety.

Manufacturer's Use and Care Manuals.

Workmen's Compensation printed material.

WORLD OF WORK
Level 5
A. Specific and Allied Work Skills

TEACHING STRATEGIES
MATERIALS
2. Following Directions

The student:
Demonstrates ability to follow complex set of directions.

Identifies person in authority in a variety of work situations.

Demonstrates ability to accept supervision in specific work situations.

## 3. Decision Making

Demonstrates ability to make appropriate decisions in work situations.
4. Independence

Demonstrates ability to perform satisfactorily in familiar work situations.

Develop group projects involving complex set of directions.

Have different students act as foreman. Evaluate project when complete.

Display samples of work of differing quality and have class discuss, evaluate and decide how to improve.

Provide opportunities for student to work in a variety of situations. Monitor and evaluate performance. Discuss with student.

From Classroom to Career, Parts 1 and 2.

## 1. Why Work

The student:

Demonstrates recognition that people are paid according to work done.

Demonstrates awareness that working for a salary brings independence.

Demonstrates awareness that satisfaction results from task/job completion.

## 2. Job Awareness

Develops knowledge of variety of jobs/careers.

Have students participate in money raising projects for class and school.

Discuss current costs of food, clothing, shelter.

Suggest that students develop a monthly budget. See Money Management section.

Invite guest speakers: architect, engineer, seamstress, author, carpenter.

Invite guest speakers from businesses, industries, unions and Chamber of Commerce.

Compile lists of jobs in various classifications: service and non-service jobs, part-time/full-time, jobs that interest me/jobs that do not interest me, jobs available locally.

Have student research and report: Jobs I Would Like To Do.

You and Your Occupation.

You and Your Pay.

Occupations 2. Occupations L. Picture Interest Inventory. Jobs A to Z. Work for Everyone. The Job Box Vocational Resource Module F. Career Search.
I'm Going to Work. The Long Hair Men (film). The Turner Career Guidance Series, 1 - 6.
C.N.I.B. List of Canadian Occupations. S.R.A. Guidance Series. Exploring the World of Jobs.
Career Choices for the 70's.

WORLD OF WORK
Level 5
B. Career Planning and Exploration

The student:

Demonstrates understanding that jobs require different skills.

Explores careers through practical experience.

## 3. Job Demands

Demonstrates good work habits.

Demonstrates positive attitudes towards work.

Completes all tasks assigned in all areas at school and on the job.

Demonstrates good listening habits.

Discuss jobs classified as skilled, semi-skilled, and education, training required for jobs.

Have student collect job brochures and research specific requirements.

Invite guest speaker from C.N.I.B.

Use work experience program.

Have a discussion about parttime jobs, e.g. babysitting.

Use work experience program.

Discuss the importance of correct attitudes, e.g. willingness to work, dependability, initiative.

Discuss work experience with individual students.

Check individual student's work to see that oral instructions are followed.

## MATERIALS

Scope Job Skills Series. Getting a Job.
Me and Jobs.
The Job Box Vocations
Resource Module F.
Me and Others.
You and Your World.
Service Occupations.
Stories About Workers.
Career Awareness
Program.
Career Clusters:
An Introduction to Related Occupations.

Good Work Habits.

Succeeding at Work.
So You Want a Job, Eh?
The Nature of Work.

A Good Worker.
Getting Ahead of
Your Job.
Perceptual Communication Skills; Developing Auditory Awareness, Level C
OBJECTIVES

The student:
Demonstrates ability to communicate effectively with people at school and on the job.

Maintains personal and other belongings in neat fashion in school and at work.

Develops awareness of job routines.

Travels to work stations independently.

Demonstrates awareness of time as it relates to job.

TEACHING STRATEGIES

Role play various situations.
Discuss differences between advice, orders and requests.

Discuss reasons for neat storage of belongings particularly in work experience site, industrial education laboratory.

Have student study jobs and routines.

Utilize resource person: Orientation and Mobility Instructor.

Discuss the importance of punctuality and job completion within a specified time.

## MATERIALS

The Job Box.

Lifeskills.
Essential Curriculum
Materials for Secondary
Students (1978/79).
Catalogue/Junior and
Senior High/Adult and Special Education.

WORLD OF WORK
Level 5
C. Finding a Job

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

1. Awareness of Personal Attributes and Interests

The student:
Identifies educational and personal characteristics required for a variety of vocations.

Identifies vocations for which he has appropriate skills and abilities.

Identifies jobs, careers, which may be of special interest to him.

Demonstrates knowledge of personal strengths and weaknesses that are important in the world of work.

## 2. Awareness of Process

Demonstrates increasing skill in using the telephone.

Have a class discussion on important personal characteristics.

Have studnets compare duties, qualifications and physical limitations of jobs.

Have students locate and write phone numbers of employers for work experience program (partially sighted).

For blind provide list of brailled names and phone numbers.

Use role playing: job related telephone calls (sick, late, checking facts), contact personnel office to apply for job.

Job in Your Future.
You Gotta Know Yourself. Talking Handbook of American Occupations. Janus Job Planner. Girls and Their Futures.
Career Awareness; The Alternative.
Service Occupations.
Work for Everyone.
Very Important
People Series.

Help!
Application Forms. Basic Skills on the Job.
How to Get the Job.
Jobs You Get.
Finding and Holding a Job.
All About Jobs.
Using the Want Ads. Getting That Job. Work Experience Manual.

WORLD OF WORK
Level 5
C. Finding a Job

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
|  |  |  |

Demonstrates knowledge of how to use newspaper "Help Wanted" columns to find a job.

Identifies and locates community and government agencies that assist in job placement.

## 3. Personal Contact

Namies person(s) who can provide assistance in finding a job.

States ways in which personal contact will assist in choice of job.

Have blind use Optacon to read want ads. Partially si.ghted may use T.V. reader. Have student read and interpret all information in want ads including abbreviations, select a job from newspaper want ads and apply for it.

Invite guest speaker from Canada Manpower Office, Provincial Employment Office, City Employment Office.

Have class discussion and make a list of services offered by community and government agencies.

Discuss ways to find part-time work, e.g. want ads, visit to work place, personal contact. Compile list of persons who could help to choose or get a job (friend, relative, teacher).

Discuss types of personal contact (persons, visit to work place or use of public employment services).

Discuss importance of job interview.

Role play interview situations.

Janus Job Interview Guide.

My Job Application

How to Get That Job. Finding and Holding a Job.
Getting a Job.
How Teenagers Can
Get Good Jobs: Applications for Positions.

WORLD OF WORK
Level 5
C. Finding a Job

OBJECTIVES
TEACHING STRATEGIES
MATERIALS

The student:
Demonstrates skills required in an interview.

With assistance, demonstrates ability to fill in an application form.

With assistance, demonstrates ability to write different types of letters, e.g. letters of application.

Have students compile list of questions and needed information relating to the job employer (what job, times, pay, bonuses) - employee (relate previous experience, school programs completed, expectations). Write a job data sheet - include name of job, name of boss, phone number of employer.

Discuss: How does the employer decide when to hire.

Compile list.
Role play with students interviewing each other.

Have students compile a list of interview do's and don'ts. Include punctuality, speech, conduct, manners and appearance.

Invite personnel officer from a local industry to speak.

Preparing for a Job Interview. Getting Applications Right.
Accent/The World
of Work.
Personal Resume Preparation.
Resumes That Get Jobs: How to Write Your Best Resume.

## 1. Health and Safety

The student:
Practises safety rules while on the job.
2. Knowledge of Work Habits

Demonstrates knowledge of responsible work habits.
3. Interpersonal Relationships

Demonstrates ability to get along with people in a variety of situations (school, community, work).

Demonstrates knowledge, awareness, and acceptance of individual differences.

Obtain report from work experience placement.

Discuss care of equipment, materials and self on the job.

Have a class discussion about punctuality.

Keeping That Job.
Attitude and Safety Posters - W.C.B.

Steady Job.
Don't Get Fired -
13 Ways to Hold Your Job.
Reference Manual for Office Personnel.

Learn to Earn.

PATH - Positive
Attitudes Towards
the Handicapped (kit).

WORLD OF WORK
Level 5
E. Workers' Rights

The student:
Demonstrates understanding
of the worth and dignity
of others.
Recognizes the rights of others.

Recognizes that there is Human Rights Legislation.

HOME MANAGEMENT
A. Clothing

OBJECTIVES

1. Care

The student:
Organizes closet and drawer space appropriately.

Locates and utilizes laundry facilities appropriately.

Ideıtifies cleaning agents and techniques for various types of materials.

Demonstrates ability to make necessary repairs.

## 2. Selection

Chooses clothing suitable for work or leisure.

Chooses style, color, and design appropriate to individual.

Invite resource person: Rehabilitation Teacher at C.N.I.B., to teach specific techniques for blind.

Invite guest speaker: successfully independent visually impaired person.

Have a classroom discussion.
Contact orientation and mobility instructor to work with Home Economics teacher and student.

Elicit parent cooperation to follow through at home.

Place braille/large print labels on cleaning agents.

Invite resource person: Rehabilitation Teacher at C.N.I.B., to offer suggestions.

Have classroom discussion about dress standards.

Use sighted guide where appropriate.

Discuss suitability of newest fashion.

Towards Independence.

A Step-By-Step Guide to Personal Management for Blind Persons, 2nd edition.

Lessons in Living.

How You Look and Dress.
Teen Guide to
Homemaking.
A. Clothing

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

The student:
Demonstrates ability to choose appropriate accessories.

With assistance, shops for clothing.

Demonstrates understanding of guarantees and warranties.

Demonstrates knowledge of what to do with substandard goods and services.

Demonstrates understanding of variation of quality, quantity and price in the market place.

Demonstrates awareness of pricing variations.

## 3. Construction

Demonstrates ability to use sewing tools and machines.

Go on field trips to department stores, speciality shops.

Have a classroom discussion.
Invite guest speakers with consumer expertise.

Have students plan major field trips, e.g. crosscountry skiing, camping.

Have them assume responsibility for earning money, budgeting, purchasing supplies, arranging transportation, etc.

Have students check variations in quality and price.

Provide classroom experience with machines and tools.

Invite guest speaker: partially sighted/blind person to discuss use of possible adaptations of machines with students and staff.

All About Clothes. Homemaking for Teenagers.

Clothing: Textiles
Education Materials Directory.

Level 5
A. Clothing

The student:

Sews and repairs simple articles.

Selects appropriate patterns, materials and accessories.

Identifies and carries out various methods of construction, with sighted guide.

Have blind/partially sighted use sighted guide when appropriate.

Sewing Techniques
for Blind Girls.

So What About Sewing. Sewing Manual.

HOME MANAGEMENT
Level 5
B. Food

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

## 1. Shopping

The student:
Demonstrates ability to budget, including sales and seasonal items.

Distinguishes between size and kinds of packaging.

Compares items for price and quality.

Demonstrates knowledge of weights and measures used in food stores.

Demonstrates ability to use stores and supermarkets.

Distinguishes between convenience stores and supermarkets.

Differentiates between wholesale and retail.

Explains purpose and use of advertising.

Invite guest speaker,
e.g. home economist.

Have classroom discussion, go on field trips, appropriate use of sighted guide.

Have partially sighted students use optical aides, blind students seek appropriate help

Go on field trips to shop for groceries to prepare for cooking.

Provide practical experience in store with sighted guide if appropriate.

Contact orientation and mobility instructor. Go shopping and have student compare prices.

Invite guest speakers, e.g. wholesaler, retailer.

Have student tape record examples of advertisements heard on the media, and evaluate same.

Food Buymanship.

Materials from:
Alberta Milk Foundation; Nutrition Communication.

Food and You.

Guides to Modern Meals

Materials from:
American Medical
Association.
Materials from:
General Food Corporation, Consumer Service
Department.

HOME MANAGEMENT
Level 5
B. Food

OBJECTIVES
TEACHING STRATEGIES

## MATERIALS

## 2. Eating

The student:
Demonstrates ability to clean kitchen area and utensils.

## 3. Preparation

Demonstrates ability to use kitchen tools, facilities, appliances with decreasing supervision.

Prepares simple meals.
Demonstrates proper methods of preparing food to preserve its value.

Demonstrates ability to plan menu, e.g. breakfast, lunch, dinner, snack.

Demonstrates ability to use recipes.

Elicit cooperation with the home to establish meal preparation, entertaining and clean-up routines.

Provide on-going experience in Home Economics class.

Provide on-going experience in Home Economics class.

Toward Independence.
Social Competency.

A Step-By-Step Guide to Personal Management for Blind Persons, 2nd edition.

Beyond T.V. Dinners.
3 Levels of Recipes for Visually Handicapped Books.
How You Plan and Prepare Meals. Student's Notebook: A Cooking Manual for Teenagers Who Like to Cook.
Simple Cooking for the Epicure.
Preprimer Cooking for Cooking Techniques for the Blind. Around America - A Cookbook for Young People. Around the World in 80 Dishes. Betty Crocker's Cookbook. Amana Braille Microwave Cookbook. Birdseye Frozen Food Recipe Book.
Cooking for Two.
Cooking Without Recipes.
The Teenagers Menu
Cookbook.
Ask Your Neighbor.
Better Homes and
Gardens Cookbook
(series).

## 4. Serving

The student:

Demonstrates ability to serve family and guests.

Demonstrates appropriate etiquette in a variety of settings.

## 5. Preserving

Demonstrates knowledge of how to package for short and long term storage, including advantages and disadvantages.

## 6. Production

Explains or describes production, processing and distribution of:

- garden products
- dairy products
- grain products
- fishing products.

Have student $p l a n$ and prepare a lunch at school and invite another class as guests.

Provide ongoing experience in Home Economics class.

Take field trip to food packaging company.

Use class discussion on freezing, canning, pickling.

Have student plan, shop and preserve food.

Take field trip to commercial food processing plant, supermarket.

Discuss complete processing of food.

Family Meals and Hospitality.

Food Facts for Young People.

HOME MANAGEMENT
Level 5
C. Maintaining the Home

OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

## 1. Selection

The student;
Chooses specific home design and explains choice on basis of construction, location, design and budget.

Recognizes responsibilities related to neighbors, landlords, community.
2. $\frac{\text { Furniture and }}{\text { Furnishings }}$

Explains what should be considered when furnishing a home, e.g. need, quality, price.

## 3. Care and Maintenance

Performs household tasks using appropriate equipment.

Use class discussion.
Take field trips based on want ads.

Make appropriate use of sighted guide.

Invite guest speakers: construction, realty.

Invite guest speaker from Landlord/Tenant Association.

See Citizenship and Individual Responsibility Section.

Have student create model home, then price furnishings to arrive at a realistic approximation of cost for his project.

Invite resource person: Rehabilitation Teacher from C.N.I.B.

Work with Home Economics teacher to organize materials and prepare for safe, productive use of equipment.

Teen Guide to Homemaking.

Everyday Machines and How They Work.

How Does It Work?

The student:

Identifies household repairs necessary for safety.

Demonstrates knowledge of and ability to use basic tools, e.g. hammer, screwdriver, drill, saw.

Demonstrates ability to do basic repairs and maintenance.

Recognizes when repairman is necessary.

Provide experience in practical use of basic tools.

Take field trips to electrician, plumber, etc. on site.

Provide classroom practice.
Visit appliance repair shop.

The Home, It's Furnishings and Equipment.

HOME MANAGEMENT
Level 5
D. Child Care

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| The student: |  |  |
| Begins babysitting for <br> short periods. |  |  |
| Demonstrates ability to <br> dress, change, feed infant <br> or child. | Have class discussion. <br> Invite guest speaker, <br> e.g. St. John's Ambulance <br> instructor. | Community League <br> Teach babysitting course, <br> first aid course. |
| Demonstrates ability to <br> make decisions about bed- <br> time and snacks for chil- <br> dren. | Elicit cooperation from <br> parents to allow student to <br> assume whatever responsibi- <br> lities he can manage in caring <br> for young children. | Course. |
| See Safety section. |  |  |

## MATERIALS

The student:

Identifies and arranges paper money and coins.

Counts money, using coins and bills.

Brailles/writes money amounts of increasing complexity.

Transmits money amounts to calculator.

Recognizes that different amounts of money are paid for different jobs.

Use blind techniques for identification of money; contact itinerant teacher as resource person.

Note: All blind and some partially sighted students need a sighted person to identify their bills for them. Once identification has been made the student should learn a basic system for folding money. It is generally best to leave dollar bills unfolded. The student should establish his own method for folding other bills, e.g. fold lengthwise, fold in half width-wise. The easiest folding methods should be used for lesser denominations to make it more convenient for the student. The one denomination should always be folded the same way.

Have student participate in school sales where money changes hands.

Money Makes Sense (Canadian edition).

Pacemaker Practical Arithmetic Series.

Speech + (talking calculator).

TEACHING STRATEGIES

Discuss desirability of various jobs, factors affecting job satisfaction, wages paid, time flexibility.

Have a class discussion: Why Volunteer? Who should be paid more?

Have students examine and discuss salary stubs. (Braille or large print samples if appropriate).

Compare different cheque salary stubs to see similarities, differences. Discuss meaning of these terms.

Have students examine different types of salary cheque stubs (braille or large print if appropriate). Discuss the meaning of terms.

Compile a grocery list and note price changes over a period of time.

## MATERIALS

Sample pay cheques. Getting Ready for Payday.

Sample cheque stubs. Working Makes Sense.

You and Your Pay. Money and The Kids: How to Earn It, Save It and Spend It.

The student:

Chooses most appropriate places to buy goods and services, e.g. wholesale, retail, basic producer of goods.

Locates items for purchase, using avrious means.

Identifies factual information presented in advertisements.

Recognizes best time to shop.

Recognizes advantages of using neighborhood retail outlets to increase independence.

Differentiates between essential and luxury items.

Develops personal budget for purchase of clothing, entertainment, gifts, etc. (monthly, yearly).

Recognizes that there are different methods of payment (cash, cheque, credit) and explains the advantages and disadvantages of each.

Have class discussion and go on field trips.

Discuss the use of the same store so student becomes known.

Discuss advantages/disadvantages of shopping when items are on sale.

Discuss essential and nonessential items for basic living needs.

Use role play, "Pretend you are going camping; what do you really need?".

Homemaking for Teenagers. Budget (game). Lets Go Shopping.

Money You Spend.
Supershopper.
Money and the Kids:
How to Earn It,
Save It and Spend It.

The student:
Writes/brailles list of goods and services that can be bought on credit.

Demonstrates understanding of the cost of using credit.

Calculates cost of credit.

Demonstrates understanding of concept of guarantee/ warranty.

Demonstrates awareness of consumer protection groups.

Uses coin operated machines independently.

Demonstrates ability to use banking forms correctly, e.g. deposit slip, cheques, withdrawal forms.

Discuss credit rating.
Discuss use of credit, advantages and disadvantages of credit, misuses of credit, easy credit.

Use simulation; emphasize the following: reading the credit agreement, cost of credit related to promptness of payment, calculating when payments are due, promise to replace parts, calculates balance due.

Have students compile lists of goods protected under warranties, e.g. car, washer. Calculate costs if any, if warranty is used.

List qualities and service expected.

Materials from Department of Consumer and Corporate Affairs.

The student:

Establishes bank account.

Demonstrates ability to use bank account.

Use simulation: fill in cheques to pay bills, complete application form accurately with sighted guide if blind. Use braille forms, large print, optacon, T.V. reader when appropriate. Use Mangold Technique for signature. Use itinerant teacher or Consultant to teach technique.

Go on field trip to bank, locate areas of service.

Role play opening an account, asking name, address, age, employer.

Have student write out cheque correctly, balance a chequebook ledger.

Discuss N.S.F. cheques.
Have student keep personal record of expenses.

Have class compile a list of places (services) for borrowing money.

Royal Bank materials.

Math for Banking.

Math for Citizenship.

## Materials from

Department of Consumer and Corporate Affairs.

MONEY MANAGEMENT
Level 5
C. Saving and Borrowing

tion of games and sports apply equally for the sighted and visually impaired. To achieve these goals the blind student can be directly integrated into many activities while others require minimal adaptations and still others are usually contraindicated.

The selection of appropriate physical education activities should be based on several important considerations:

1. Any adaptation to equipment.
2. Accessibility to required facility.
3. Safety.

## Gymnastics

The student:
Participates in the following forms of gymnastics:

- tumbling/floor exercises
- uneven bars
- box horse
- balance beam
- rings
- parallel bars.

Note: The major physical education goals of skill development, fitness development knowledge and apprecia-

## TEACHING STRATEGIES

MATERIALS

Adapted Physical
Education and
Recreation: A Multidisciplinary Approach.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
|  |  |  |

The student:
Participates in the follow-
ing dance forms:

- creative/modern
- square
- fold
- round
- jazz
- ballroom.


## 3. Games

Participates in selected games from the following categories:

- racket
- target
- relay
- tag.
- team:
- goal ball
- soccer
- hit-in baseball
- California kick baseball
- hockey.

Note: For the visually impaired, racket and target games are not usually recommended; however, many blind students enjoy target games like archery, bowling and horseshoes because of the social aspects of participation. These games are easily adapted for the blind. The selection of an activity should be guided by suitability and interest of the student.

Tag games are successful if "it" carries an audible object and the boundaries of the game area are clearly and safely marked.

Note: Team games generally involve a ball (or object) being advance toward a goal by one team against an opposing team. This type of play usually includes flight of object and physical body contact. Include adaptations for visual cues to account for these two factors without distorting the game. For the (continued next page)

Modern Dance.
Dance Awhile.

Movement Without Sight.
Active Games for the Blind.

Physical Education for Blind Children.

Audible ball.

Level 5
B. Games and Activities

The student:
6. Swimming

Demonstrates fundamental swimming skills.

Participates in:

- water games
- diving
- canoeing
- sailing
- synchronized swimming
- water safety activities.


## 7. Track and Field

Demonstrates the ability to:

- distance throw (shotput, discus, javelin)
- long jump
- high jump
- run (all distances, cross country).

TEACHING STRATEGIES
visually impaired use brightly colored objects and goals;
for the blind use audible
balls and audible goal
locators.

Have blind swimmer swim by the wall of the pool to help keep his direction.

In competitive swimming, warn the blind swimmer, e.g. tap with cane, before he reaches the wall so he won't strike his head.

Have blind student participate in other aquatic activities with a sighted "buddy".

No modifications necessary.

Use guide wires or the international system of calling: 3-left, 4-center, 5-right of lane, or tandem partner running, using a short rope between the two.

MATERIALS

Swimming for the Handicapped, Instructor's Guide.

Aquatics for the Handicapped.

Swimming for Children with Physical and Sensory Impairments.

Physical Education and Recreation for the Visually Handicapped.

## 8. Outdoor Pursuits

The student:

Demonstrates basic skills in the O.D.P.U. activities:

- camping
- orienteering
- hiking
- cycling
- skating
- cross country skiing
- downhill skiing.

9. Fitness

To achieve average or better fitness levels, utilizes the following programs:

- asrobics
- weight training
- yoga
- relaxation training.

Use sighted "buddy".
Use braille compass.

Use tandem.
Use sighted "buddy", pinnie label skier.

Use single unit, multistation device to eliminate danger of dropping bars and weights.

Physical Education and Recreation for the Visually Handicapped. Kids Camping.

Canadian Association for Disabled Skiers.

Fitness Tests for the Blind.
A. Music
"In the area of music, visually handicapped children - contrary to lay belief are not gifted merely as compensation for blindness." 1
"... of all the avenues of communication open to the blind child, music is one of the most significant and thus of incalculable value. ... His auditory and tactile senses permit him to relate to music as a listener or a performer, and these experiences afford him many opportunities to participate on an equal footing with his sighted peers." 2

The music curriculum for elementary schools developed by Alberta Education (1977) is suitable for use with visually impaired students. Since no music curriculum has been developed for either Junior or Senior High Schools, the visually impaired student should be integrated into the school's existing music program.

The following suggestions should be incorporated by the music teacher to assist her in successfully integrating the visually impaired student into her program.

## Rhythm Band

"Benefits derived from rhythm bands are the same for normally seeing as for visually handicapped students. However, teachers must assume responsibility for acquainting students with every instrument - the sound of it, how it feels in the hand - because otherwise each student will acquire only a limited knowledge about the instruments played by other students.

If the teacher points or gestures to indicate when students should or should not play, blind students will not receive such signals; therefore, teachers must adopt audible cues."

## Identification of Instruments

To facilitate recognition of tone quality, teachers should play instruments or use recordings, thus familiarizing the students with identifiable and characteristic sounds. Awareness that a voilin sounds like a voilin and not like a tuba is the lesson objective. A second step is to allow visually impaired students to handle and examine all the instruments. If the teacher plays a recording of a clarinet, students should have an opportunity to examine a real clarinet in class.

Instruments in a given family, e.g. strings, should be compared for sound, size, number of strings, position held when played, etc. Since experimentation is a channel for learning, the student might hold a string while it is being bowed and note the difference when he removes the finger. Also, differences between heavy and thin strings should be explored. How does the performer achieve legato and staccato effects?

Combinations of instruments can be introduced once the students have become acquainted with individual instruments. If live performers can be utilized, they might place themselves in various parts of the room so that the individual sounds can be more easily distinguished. In this exploratory stage, the human voice - alone and in combinations - should also be included. Having felt vibrations in other instruments, the students might feel vibrations in their throats and diaphragm.

## Music and Self-Expression

Self-expression to the accompaniment of music is desirable for all students. Blind students, however, may be limited in their experiences when required to depict certain behaviors, as when the teacher says: "Pretend you are a bear and walk like one", or "Make believe you are a daisy blowing in the breeze". Therefore, blind students must be shown how to perform the intended action. The teacher might try to draw out ideas rather than impose them. She might say: "Listen to the music, and then make your feed do what the music seems to say", or "What do you think your arms want to do with this kind of music?". Under these conditions, visually impaired students experience no disadvantage.

Some blind students are reluctant to move out or do so only awkwardly or fearfully. Because of this, teachers might request them to "act out the music" right where they are. If students learn enough freedom and confidence while staying in one place, they may learn, though belated, how to move in an enlarged area.

3
Music and Dance (Eurhythmics)
Eurhythmics involves following a prescribed pattern imposed by the teacher or choreographer. Students learn to coordinate body parts and work toward independence of separate members. Eurhythmics yields gains in muscular control and coordination, grace, poise, and self-confidence. However, more modern methods of rhythmical gymnastics give greater freedom of movement, encourage more self-expression through body movements.

## Music Notation in Braille and Large Print

If sighted students are expected to read music notation on the staff at a given grade level, partially sighted students at that time should also have such competence in enlarged form. Teachers can use either specially prepared sheets with the enlarged staff adding notation by hand, or can purchase ready made enlarged sheet music if the desired title is available (see Note).

Occasionally a given community may have a sighted music teacher who knows braille music notation or a blind teacher of music with whom the student and his family might arrange private lessons for both notation and performance.

Visually impaired students, their parents, and their teachers must not jump to conclusions that careers in music are guaranteed and automatic. Frequently the presence of musical talent is overestimated. Interest and enjoyment are not enough to launch a career. Countless hours of arduous and lonely practice are imperative.

Visually impaired students in music have one of three choices if contemplating a musical career:

1. Serious music based on use of notation and exactly prescribed performances.
2. Popular music, which calls for the development of a personal style distinctive from that of other performers. If the visually impaired musician has a good ear for reproducing what he hears in live or recorded performances, he may have little or no need for notation itself.
 performance in concerts.

The student using braille notation must memorize it before being able to play it. This consumes much time and restricts the performer's repertory. Unlike a sighted person, who can do a reasonably accurate job even on his first exposure to a musical composition, the braille reader cannot "sight read" music. Partially sighted students have similar difficulties. Because of their visual problem, they may not be able to read quickly enough to read and play simultaneously; so they may have to memorize also. Furthermore, the partially sighted may need to use a special music rack that brings the sheet close to the face so that it can be read.

It is hoped that the persistent will sell themselves on the quality of their musicianship and not on their blindness.

## Attending Professional Concerts

Although attending live performances has the same values for both visually impaired and their sighted peers, one difference lays in the inability of the former to read program notes distributed to the audience. There may not be sufficient time before the performance to allow a sighted person to read in whispers. Without these notes, the listener misses vital information pertaining to historical setting or analysis of art form. To correct this problem, teachers might secure advance copies of the program - often advertised in newspapers - and then play the same compositions at school, discussing pertinent information. A culminating experience might involve listening again to the same compositions after the concert and sharing reactions to the live performance.

Group Participation (Chorus, Orchestra, and Band)
Visually impaired students should be encouraged to assume active memberships in school organizations devoted to music. This type of integration with sighted peers may result in lasting friendships beyond the school year, in vocational channels (Bevan, 1965) and in keys that unlock social doors making possible broader interpersonal relationships. Some modifications are necessary, as outlined in the following paragraphs.

Processions and Recessions: Moving in straight lines equidistant from those in front and behind is important for aesthetic effects. If a blind student is paired with a sighted partner, they might link little fingers of adjoining hands in an inconspicuous way. An understanding teacher might have students proceed by twos instead of in single file when a blind student is a member of the group. When required to go in single file, a blind student might use a thin string held taut by the student preceding and following him with the string wrapped around his own finger halfway between the two. Being confronted with new territory poses the problem for blind students of not knowing distances or turns or the presence of steps, since rehearsals may be conducted in one place while the public performance is held elsewhere. If possible, arrangements should be made to take the blind student to the new site in order to orient him to it.

Marching Band: Partially sighted students may succeed as participants in a marching band, whereas blind students might find it extremely difficult to keep in line while marching and playing. However, blind students should be permitted to try doing it in rehearsals. Perhaps blind students can orient to a particular sound preceding them, such as a drum or flute.

Pairing with Partner: In chorus, band, or orchestra, visually handicapped students might be placed beside a capable musician singing or playing the same part. Such partners can serve as examples to emulate. In rehearsals, blind students can listen part of the time and later sing or play when the material has become familiar. The pair might work at times other than during rehearsals with the sighted performer playing or singing the part for the other to listen to and learn. When several persons make up a given section (such as tenors), the blind student should be seated in the front of the group so that more of the sound of his part reaches him.

Use of Recordings: If a student group is practising a given composition already recorded by another group and with the same arrangement, visually handicapped students might be assigned to study by listening repeatedly to that recording. Furthermore, the Division for the Blind and Physically Handicapped, Library of Congress, is producing kits containing sound recordings with music in usual renditions, also at a slow rate for study purposes, with solos unaccompanied, and with notation in both braille and large type. These materials can be of utmost value if the teacher's selection and the titles thus made available coincide.

Signaling: Music teachers who are not accustomed to having a visually handicapped student in the group may need to modify their signaling procedures. A nod or hand gesture will not be noted by him. Instead, a code of raps with the baton on the music stand might be devised.

Blind Soloist and Accompanist: Although use of the voice may be correct, blind soloists may need assistance with stance, facial expression, and gestures. If the soloist is blind, he can usually take his cue from the accompanist and the musical introduction, if there is one. If the accompanist is blind, he must be certain that the soloist is ready before beginning the introduction." 3

Note: The Materials Resource Centre, Department of Education, Alberta, has enlarged the sheet music available to Elementary Music teachers as part of the Edmonton Public School Board Music Curriculum. A teacher requiring music in large print should contact the itinerant teachers or provincial consultants for the visually impaired.
"Frequently only the words of a song need to be brailled. In fact, often memorization will suffice and no brailling is necessary." 4

1 Handicapped Child in the School. Music for Visually Handicapped Children, Napier, Grace. The Visually Handicapped Child in the School.
4 Your School Includes a Blind Student, Willoughby, D., Lansing, S., Barber, M., Maurer, P. National Federation of the Blind Teachers Division, p. 18.

FINE ARTS AND INDIVIDUAL EXPRESSION
Level 5
B. Art
OBJECTIVES $\quad$ TEACHING STRATEGIES $\quad$ MATERIALS

## 2. Drawing and Painting

The student:

Demonstrates awareness of the power and scope of line, texture and value as individual elements and as elements in a total composition drawing.

Demonstrates awareness of the forces of line, shape and color through tactual experiences using a variety of mıterials and media (páinting).

Few adaptations needed for the partially sighted. Have blind use different substances in which to dip stick, pencil, etc., e.g. white glue to enable them to feel their lines. Also make use of foil paper.

Have students study the variety of line, pattern, shapes and colors found in the world.

Provide the blind and partially sighted students with the opportunity to identify tactually, explore and use the various tools and materials to understand how they contribute to various techniques and effects.

Provide experiences in the following:

- cardboard painting
- spatual painting
- resin technique
- stippling
- roller painting
- stick painting
- block-out techniques.

Junior High School
Art Curriculum Guide. Junior High Art Guide. Creative Drawing Point and Line. Form, Space and Vision. Drawings: Ideas, Materials and Techniques. Art Fundamentals, Theory and Practice.

Junior High Art Guide. Brush and Palette. Painting in the Classroom.
Imaginative Techniques in Painting. Let's Find Out About Color.

Junior High Art Guide. Creating with Plaster. Creating with Paper.
Creative Clay Design.

Demonstrates understanding of the potentialities of synthetic media.

Have class discussion on cultural influences, and the following various traditional forms and techniques:

- texture collage
- relief-sand-casting
- environmental relief
- monolithic mass-carving in plastic
- penetrated form-papier mache on wire
- three dimensional linearwire sculpture
- planor/stabile cardboard
- planor/linear mobile
- wood sculpture.

Use the following:

- painting: texture translucent, acrylic sheets, cellulose, joint filler
- sculpture: modelling paste, acrylic sheets, cellulose, joint filler
- graphics: collotypes, etching, cellulose, joint filler
- mosaics and stained glass effects: grout, leading, tesserae, laminations
- textiles: stencil method, painting method, batik method
- wall hangings
- etching and engraving
- carving: styrofoam, urethane.

Discuss adoptability of
synthetic media both to
traditional and to new processes.

Junior High School Art Curriculum Guide. Plastics as an Art Form. Sculpture in Plastics. The Rainy Day Book.

FINE ARTS AND INDIVIDUAL EXPRESSION
Level 5
B. Art

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

The student:

Demonstrates ability in the various techniques of working with clay: decorating and firing ceramics and pottery.

## 4. Printmaking

Demonstrates ability to express a progression of ideas and skills in printmaking.

Note: All students must learn what tools and equipment may be utilized and how to handle and care for them.

Discuss the cultural influences on the ceramic arts.

Demonstrate basic techniques, e.g. wedging, texturing; provide information on storage and decoration of the following:

- pinch and coil pots
- applique, graffito, cameo resist
- glazing and firing procedures
- slab pottery
- forming clay over objects, e.g. bowls
- ceramic jewellery
- ceramic tiles
- uses of grog
- ceramic sculpture.

Texture the ink or glue that is used in all techniques of printmaking, with sand, sawdust, minute pieces of pasta, etc.

Have students make textured variations on the print by using bits of thread, paper or tape under the printing paper. Position on a sheet of cardboard placed on the bed. Use this method with lightweight paper.

Junior High School
Art Curriculum Guide. Ceramics, A Potter's Handbook.
Making Pottery Without a Wheel. The Complete Book of Ceramic Art.
Pottery and Ceramic Sculpture.

Junior High School
Art Curriculum Guide.
Creative Printmaking. Relief Printmaking.

The student:

Demonstrates awareness of how color and textural effects may be achieved and employed in a decorative manner (fabric and fabric decoration).

TEACHING STRATEGIES

Provide experiences in the
following:

- monoprint
- mask and stencil
- built-up surfaces
- relief printing
- collograph.

Provide direct experiences with fibres.

Incorporate fabric into painting, collage, printmaking, soft sculpture and a variety of crafts such as:

- weaving
- tie dyeing
- batik
- stitchery
- applique
- printing on fabric
- macrame.

MATERIALS

Stitchery Art and Craft. Batik Art and Craft. Weaving Without a Loom. Adventures in Knitting.

FINE ARTS AND INDIVIDUAL EXPRESSION
Level 5
C. Drama

The student:
Demonstrates ability to focus complete attention on a specific exercise.

Demonstrates ability to express himself through movement.

Demonstrates awareness of the five senses and gathers more accurate information from the environment.

Demonstrates ability to communicate a sensory experience so that others can experience it vicariously.

Demonstrates ability to create original and interpretive thoughts and ideas.

Demonstrates ability to use communication techniques, including non-verbal techniques.

Develops an awareness of anatomy of speech production.

Have students listen for sounds, think "black".

Use mirror exercises.
Use memory recall.
Use mime.
Use body language, street fights, statues, characterization, improved mimes.

Use blind exercise, telepathy, elevation, total group exercise, to enhance communication and comprehension abilities.

Use mime and improvisations.

Use puppetry, improvisations: exposition, conflict, rising action, climax, falling action, resolution.

Have student use facial expression, including eyes, body posture, gesture, body actions, space (relate to partner as well as group), time (aware of music accompaniment), composition and effort.

A Different Drummer.

TEACHING STRATEGIES

Use puppetry, improvisation.

Have students practise the basic principles of oral interpretation: phrasing, pauses, visualizations, suggestions - imagery and emphasis - subordination, meetings, storytelling, character portrayal, radio programs, interviews, projection, articulation, pronounciation and resonance, rate, inflection, pitch, intonation.

Have students practise breath control.

Have student initiate the use of media to enhance imaginative work and to help communicate ideas or themes for improvisations or dramatic literature.

Use role play to assist in considering consequences.

Have student relate personal experiences and adapt observations to a specific role. Have student work cooperatively within a group to achieve a common goal.

MATERIALS

Theatre Game Tile.

Basic Drama Projects.
Readers Theatre.
Creative Communication,
Junior High Drama Curriculum Handbook Radio Unit.
Voice, Speech and Oral Interpretation.

Taking Off.

Nobody in the Cast.

Theatre Game Tile.

The student:
Demonstrates knowledge of the mechanics of working audio-visual equipment.

Demonstrates appreciation for various theatre forms.

Demonstrates ability to evaluate other people's work constructively.

Demonstrates appreciation for Iramatic literature through an introduction to the one-act play.

Demonstrates appreciation for production techniques through an introduction to production elements, e.g. staging and make-up.

Have student use equipment: record player, tape recorder, opaque projector, over-head theatre lights.

Use experimentation and exposure to various theatre forms.

Go on field trips to local productions.

Attend performances of visiting troupes.

Use class discussion.

Go on field trips to see one-act play.

Have a class discussion about television.

Visit the theatre; invite visiting troupes.

Use discussion and involvement in music, costumes, lighting, set design, makeup, choreography, direction.

Improvisation.
Basic Drama Projects.
Drama Work One.
Junior High Drama.

Curriculum Handbook.

Stage Make-Up.
D. Leisure Time Activities

Many of the games and activities listed in Levels 3 and 4 are suitable for Junior and Senior High School students. In addition the following games and activities may be included:

- whist - solitaire
- bridge - woodwork
- canasta - leatherwork
- poker - sculpting.

The list of active recreational pursuits listed in Levels 3 and 4 may be expanded by adding the following:

- weightlifting
- diving
- archery
- target shooting
- rowing and canoeing
- golfing
- curling.

The visually impaired student at the Junior and Senior High School level should be encouraged to participate fully in all social activities in the school such as clubs, dances, student council, year-book, productions, plays, etc.

The student:
Identifies what constitutes a family from societal/ legal perspective.

Assumes responsibility within the family and community.

Demonstrates responsible attitude towards property of self and others.

Identifies factors which cause change in families.

Identifies agencies which influence the family.

Participates in community in a variety of roles.

Have a class discussion; bring in speakers from legal aid, family court, judge, etc.

Utilize guest speakers.

TABA Program in Social Services.

The student:

Accepts responsibility for personal and public property.

Demonstrates respect for the personal property of others.

Participates in decisions regarding rules.

Identifies privileges and consequences associated with school rules and routines.

Accepts responsibility for own behavior and duties appropriate to age.

Participates responsibly in delegating and electing authority figures.

Utilize class discussion.

Set aside a time each week for class meeting when concerns of the students are responsibly voiced and discussed.

Invite principal for a discussion of school rules and regulations to acquaint class with reasons behind rules.

Involve students in decision making. Have them elect class representatives to student council.

Identifies the role of common provincial helper agencies.

Demonstrates awareness of how authority is exercised in a responsible manner.

Participates in community events and organization.

Demoristrates understanding of different countries and forms of government in the world.

Demonstrates awareness of cultural differences within Canada.

Demonstrates awareness of authority figures and agencies within the province.

Identifies how laws are made and by whom.

Identifies three levels of government.

Demonstrates awareness of provincial rules and laws, e.g. Alberta, no sales tax.

Utilize guest speakers: Provincial Park Warden, representatives from Departments of Health, Agriculture and Labour.

See Social Studies section.
Discuss roles of agencies such as: Departments of Social
Services, Agriculture, Highways, Education.

Discuss political ethics.

Have a class discussion about the French-English issue.

Utilize guest speakers from various government agencies.

Use guest speaker, e.g. M.L.A. Assistant Ministers of various departments.

Go on field trip to Parliament Building.

See Social Studies section.
Have a class discussion on differences in provincial legislation.

Man and His Cities.
TABA Program - People in Communities.

The student:
Identifies major news stories: local, provincial, national, international.

See Social Studies section.

Set up debate, e.g. political issues.

Set up class/school newspaper.

Take field trip to local newspaper, television station.

Utilize guest speakers from media, e.g. newspaper reporter, weather announcer.

Learning from Newspapers.

Level 5
E. Environmental Education

## 1. Ecology

The student:
States some laws dealing with animal care.

Demonstrates knowledge of reason why fees are charged, e.g. park fees, license fees.

Identifies the positive/ negative effects of man's intervention in nature.
2. Natural Phenomena

Demonstrates some understanding of natural disasters, e.g. earthquake.

Demonstrates knowledge of long term effects of weather, e.g. dry summer poor crop.

Teach student to recognize that feeding birds may seem to be a charitable thing to do, but the practice builds a dependency that can kill the birds fed.

Show a film on the "Balance of Nature". Provide explicit despription.

Have a class discussion about the effect of hunting as a "sport" upon populations.

Have a class discussion about organizations that struggle
to save disappearing species, e.g. Ducks Unlimited.

Play game where students guess the "endangered species" from a description.

Science Experiments You Can Eat.
Hinterland Who's Who Series.
Parks and Wildlife Materials.
Audobon magazines. Canada's Endangered
Species (video cassette).
E. Environmental Education

## OBJECTIVES

## 3. Energy

The student:
Demonstrates knowledge of alternate energy sources, e.g. coal, windmill.

Demonstrates ability to make responsible energy choices in daily life.

## 4. Pollution

Demonstrates knowledge of the necessity for proper disposal methods when using outdoor facilities, e.g. toilet, cooking.

States fines that can be levied for littering, illegal dumping, improper weed control, etc.

Recognizes that there are socially acceptable methods of showing his disapproval of environmentally damaging practices.

Teach students to ask others not to smoke. Have them suggest polite and considerate techniques to foster cooperation and learn to avoid confrontation and insult.

Have class invent skits to illustrate the above. 435

Pollution Solution. Living Well in Times of Scarcity.

Energy Management for the Future.
effective in removing grease in less than hot water, and the use of a bleach as a final rinse will kill most bacteria remaining on dishes after washing.

Teach that the correct method of disposing of wash water is the use of a small sump pit; water that contains soap, bleach, etc. should not be thrown into a lake or stream since it will kill the aquatic life.

Government Environmental Resource Materials Guide.

CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
Level 5
E. Environmental Education

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

The student:
Demonstrates knowledge of service industries to aid a community in sanitation and environmental areas.

Demonstrates awareness of the contribution made by these industries, e.g. bottle depot workers, environmental control agencies, parks and wildlife workers.

Demonstrates awareness of the dangers of prolonged exposure to excessive noise.

Saves recyclable materials and returns to appropriate place.

## 5. Conservation

Demonstrates knowledge of reasons for conservation, e.g. depletion of natural resources.

Demonstrates understanding of the concept of renew-able/non-renewable resources.

Demonstrates ability to select energy saving modes of travel, e.g. bicycle.

## 6. Safety

Demonstrates some knowledge of survival methods.

Demonstrates small-craft water safety.

Go on a field trip to a sewage treatment plant, the garbage dump, a water treatment station.

Use the Red Cross Water-Safety and Small Craft courses in a spring camp at a nearby lake.
E. Environmental Education

OBJECTIVES
TEACHING STRATEGIES
MATERIALS

The student:

Demonstrates ability to swim and drown-proof.

Practises safety rules that apply to outdoors.

Accepts direction from persons in authority in parks, etc.

Demonstrates some knowledge of disease transmitted by animals.

Recognizes risks involved in traveling on frozen lakes or rivers.

Arrange swimming classes at a nearby pool with qualified instructors to teach the students.

Teach students the procedure to follow if they are ever bitten by a large animal.

Teach students who are very sensitive to insect stings the correct precautions and to carry their medications when in the outdoors.

Collaborate with parents to go ice fishing.
understanding self and getting along with others
Level 6
A. Knowledge of Self

| OBJECTIVES | TEACHING STRATEGIES | MATERTALS |
| :--- | :---: | :---: |

1. Personal Characteris-tics/Self-Identification

The student:
Identifies the need and function of self-identifying information, e.g. I.D. number, social insurance number.

Relates personal interests, abilities, limitations to vocational and other selection of activities.

Recognizes and accepts areas where an individual effort can improve physical performance and those where it can not.

## 2. Physical Self

Interprets and categorizes sensory input with increasing accuracy.

Identifies the effect of physical handicaps or disorders on self and others.

Demonstrates understanding of intercourse, pregnancy, birth, veneral disease, birth control.

Have students fill in sample job applications independently (partially sighted).

Help blind students.
Have students write resume.
Use class discussion, field trips, guest speaker, and work experience.

Canadian Classification and Dictionary of Occupations.
How To Be Your Own Best Friend. Exploring Your Personality.

Use class discussion and guest speaker.

Have a class discussion.
Invite guest speaker, e.g. community resource people: public health nurse, doctor.

Innerchange, Unit 20. Career for All Series. It's Your Life. Developing as a Person. Lifeline.

Perspectives for Living. Family Planning. Girls and Sex.

## MATERIALS

Sex Education and Family Life for Visually Handicapped Children and Youth: A Resource Guide. Sex Education for the Visually Handicapped in Schools and Agencies.

Have class discussions. Use role play.

Use role play, drama, and class discussion.

Predicts emotional reaction of self and others given a situation.

Recognizes that emotional states vary with the individual and circumstances.

Identifies and describes inappropriate ways of dealing with stress.

## 3. Emotional Self

Identifies increasing number of emotions in self and others with increasing accuracy.

Demonstrates increasing awareness of mixed and changing emotions, in self and others.

Describes emotional state with accuracy.

Exploring Your Values. Growing Up Emotionally. Exploring Your Personality. I'm O.K., You're O.K. Understanding Love.

It's Your Life.
Developing as a Person.
Facing Issues of
Family Living.

How to Increase Your
Self-Confidence.

Looking Ahead to
Marriage.
How To Be Your Own
Best Friend.
The Search for
Self-Respect.
Materials from Canadian Mental Health Associationd
understanding self and getting along with others
Level 6
A. Knowledge of Self

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :---: | :---: |

The student:
Identifies and discusses ways in which some stress is beneficial rather than harmful, e.g. pressure to complete a task.

Demonstrates ability to cope with stress.

Expresses and controls emotions in a variety of settings.

Demonstrates increasing skill in recognizing and avoiding potentially provoking situations, including unfamiliar situations.

Innerchange, Unit 28.

Innerchange, Units 2, $6,17,25$ and 29.

Use discussion, role play, appropriate stories, work experience programs.

Use decision making techniques.

See Problem Solving and Decision Making section.

Values Clarification. A Marriage Manual. Innerchange. Understanding Love. Getting Along With Others.

Growing Up Socially. How to Live With Parents.

UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
Level 6
B. Social Relationships

TEACHING STRATEGIES
MATERIALS

The student:

Recognizes that people need protection and structure.

Recognizes that people are expected to be independent and responsible.

Recognizes that roles associated with a given sex are changing.

Recognizes that people have differing expectations for sex role behavior.

## 3. Handling Social Interaction

a) Expressive Communicafion Skills

Demonstrates a continuing development of communication skills.

Communicates effectively in public meetings.

Uses appropriate communication in various settings.

Identifies a wider number of blocks to communication and how to deal effectively with these.

Refines ability to check communication.

Communicates feelings effectively in a wide variety of settings.

Use class discussion, role play, appropriate materials.

Use classroom discussion, role playing, appropriate books, films, etc.

Who's Afraid of
Virginia Wolf?

Physical Disability A Psychological
Approach, ch. 11. Getting Along With Others.

I'm O.K., You're O.K.

Relationships. Making and Keeping Friends.
Telling it Straight.
b) Receptive Communication Skills

The student:
Demonstrates increased skill in listening by "checking out" what the speaker is saying, both affective content and informational content.

Practises interpersonal communication skills.

Detects bias, prejudice, or propaganda.

Demonstrates understanding of how the use of gestures, asides, satire, voice inflection affects meaning.
c) Problem Solving and Decision Making

Applies steps in problem solving to new and personal experiences or situations.

Makes decisions in an appropriate manner, having obtained available information, weighed alternatives and evaluated possible consequences.

Develops an awareness of how potential problem situations can be avoided.

Uses conflict management strategies in new and personal experiences and situations.

Use appropriate films, tapes, books, role play and classroom discussion.

Establish home/school contact, to work together to increase the student's number of areas for independent action.

Use role play of appropriate simulates situations.

Have a classroom discussion.

## MATERIALS

How to Get Along With People. Relationships.

Getting Along With Others.

Lifeline.

Physical Disability -
A Psychological
Approach, ch. 11.
understanding self and getting along with others
Level 6
B. Social Relationships

## OBJECTIVES

TEACHING STRATEGIES

## MATERIALS

4. Rules and Routines

The student:
Identifies probable rules in a number of unfamiliar situations, e.g. on the job, public facility.

Follows rules of appropriate behavior in a variety of unfamiliar settings by modelling appropriate behavior of others.

Identifies the potential consequences of breaking rules in a variety of unfamiliar situations.

Formulates rules for unfamiliar situations and identifies consequences.

Recognizes the need to abide by rules even when not agreeing with them.

Recognizes rules that relate specifically to visually impaired, e.g. guide dogs, white canes.

## 5. Social Roles

Identifies roles in unfamiliar situations and ascribes probable characteristics to these roles, e.g. boss/employee.

Recognizes that conflict may arise when people behave in ways not consistent with role expectations, e.g. police officers who break the law.

Go on field trips.

Invite guest speakers: Orientation and Mobility Instructor, Rehabilitation Teacher from C.N.I.B.

Use classroom discussion, books, field trips into community.

Emily Post Book of Etiquette for Young People. Esquire Guide to Modern Etiquette. Manners Made Easy.

UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
Level 6
B. Social Relationships

TEACHING STRATEGIES
MATERIALS

The student:

Recognizes that a person must assume different roles at different times in his life, e.g. child, parent, student, employee.
6. Values and Social Expectations

Recognizes that values and social customs vary with the culture and that a custom or value appropriate in one setting may not be so in another, e.g. Hutterites.

Relates personal values to those of society.

Demonstrates understanding of how group opinion affects personal value system.

Recognizes when personal and social values come in conflict, and attempts to resolve the conflict.

Demonstrates understanding of the concepts of human rights, e.g. dignity and equality.

Demonstrates understanding of legal and moral responsibility for self and others.

Demonstrates understanding of basics of penal code.

Have student talk to relatives and friends and report back to class.

Have a class discussion.

Use books, films and news reports.

Invite guest speakers.

Relationships.
Understanding Dating Relationships.

HEALTH
Level 6
A. Nutrition

## OBJECTIVES

TEACHING STRATEGIES

The student:

Demonstrates knowledge of food groups in planning and selecting food for a well balanced diet.

Demonstrates awareness of the relationships between nutrition, fatigue, illness and growth.

Recognizes the protection provided by the health department in checking food distribution establishments

Have student plan several types of menus, also plan and prepare low-cost, nutritious meals.

Stress importance of following Canada Food Guide.

Discuss calorie requirements.
Invite guest speakers, e.g. dietician.

Have student keep a record of calorie intake.

Discuss obesity, weight reducing and vitamin pills.

Discuss deficiences in diet.

Discuss importance of good nutrition during pregnancies.

Take field trips to school cafeteria, restaurant, supermarket, food processing plant.

Invite guest speaker: Health Inspector.

## MATERIALS

Teaching Resources for Secondary School. Canada Food Guide.
Home Economics
Curriculum (1975).
Teen Guide to Homemaking.

Battling Disease: Protecting Your Health.
Food and Your Weight.
Weight Watchers
of Alberta.
I Think I'11 Start on Monday.
100 Delicious Ways to Stay Slim.
Food Facts for Young People.

## OBJECTIVES

TEACHING STRATEGIES

Have a class discussion on the anatomical characteristics of males and females.

Invite guest speaker, e.g. gynecologist, obstetrician, pediatrician, to discuss effective methods of birth control.

Discuss facts and fallacies.

## 2. Care of Body

Practises good grooming and cleanliness.

Demonstrates a balanced program of rest, work and recreation.

Practises physical fitness program.

Demonstrates ability to administer first aid.

## MATERIALS

Braille Representation of Sexual Organs.

Sex Education for the Visually Handicapped in Schools and Agencies (selected papers).
Sex Education for Visually Handicapped Children and Youth A Resource Guide.

You and Your Health. Facts About Veneral Disease.
V.D.: Facts You Should Know. A Teen Age Guide to Healthy Skin and Hair.
V.D.: The ABC's. Heart Attack: You Don't Have to Die. V.D.: Kids Can Get It Too.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| 3. Drugs and Alcohol |  |  |
| The student: |  |  |
| Takes prescription and nonprescription drugs independently and appropriately. |  |  |
| Recognizes the mental, physical and emotional consequences of use of alcohol, tobacco, narcotics and other drugs. | Invite AADAC guest speakers. <br> Show films, discuss. <br> Have student design a commerical on drug advertisement. | XF - To Smoke or Not to Smoke; Tobacco, Alcohol, Your Health. |
|  |  | Same Films as Level 3, plus |
|  |  | Alcohol Problem: <br> What Do You Think? |
|  |  | Day in the Death of Donnie B. |
|  |  | The Drag. |
|  |  | Focus on LSD: Other Psychedelics. |
|  |  | The High Hooked. |
|  |  | Facing the Facts: |
|  |  | Drugs, Alcohol and |
|  |  | S.R.A. Guidance Series. |
|  |  | Facts About Narcotics and Dangerous Drugs. |
|  |  | About Drugs. |
|  |  | Alcoholics Anonymous. <br> Drugs: Facts on |
|  |  | Their Use and Abuse. |
|  |  | Facts About Alcohol. |
|  |  | Facts About Smoking and Health. |
|  |  | Youth and the Drug |
|  |  | Problem. |
|  |  | Know About Drugs. |
|  |  | Smoking: Your |
|  |  | Choice Between |
|  |  | Life and Death. |

The student:
Recognizes the contribution of the helping professions improving community health, e.g. medicine, dentistry, psychology, social work.

Uses community health and mental health agencies appropriately.

Demonstrates ability to locate and utilize community health services.

Travels to doctor and dentist independently after making appointment.

Go on field trips to hospital, clinic, doctor's office, to compare the differences in services.

Have a debate: "Compulsory Medical Insurance vs. Voluntary Health Care Insurance".

Invite guest speakers: dentist, general practitioner, specialist, health department personnel.

Teach emergency phone numbers.
Have a class discussion.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| The student: |  |  |
| Demonstrates independence <br> and reliability in coping <br> with dangers and accidents. | Have a panel discussion. <br> Bring in guest speakers, | Smartest Kid in Town. <br> (film). |

The student:
Demonstrates ability to seek assistance from the public in case of a fire in a public building.

Use role play.
Have a class discussion, emphasizing ways of informing the public of the student's handicap.
E. Traffic

| E. Traffic | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| The student: |  |  |
| Demonstrates understanding <br> of the importance of using <br> safety equipment in <br> vehicles. | Discuss the necessity of <br> wearing seat-belts, helmets, <br> on motorcycles and bicycles. |  |

WORLD OF WORK
Level 6
A. Specific and Allied Work Skills

## OBJECTIVES

TEACHING STRATEGIES

## 1. Use of Tools and Equipment

The student:
Demonstrates the ability to choose and use all power-driven tools and equipment in the shop.

Demonstrates ability to organize and care for tools and equipment.

Demonstrates ability to construct complex projects.

Demonstrates ability to follow safety procedures when using tools and equipment.

## 2. Following Directions

Demonstrates ability to follow all types of directions independently and accurately.

Have student choose and complete project.

Have student organize and care for tools and equipment independently.

Use large print/braille labels where required.

Have student complete assigned project which requires the use of more complex tools and equipment.

Discuss the necessity of safety shields when using power-driven tools and equipment.

Discuss the necessity of listening carefully to the directions; and concentrating on the task at hand when using power-driven tools and equipment.

Invite guest speaker from Industrial Safety.

Develop individual projects involving complex sets of directions.

Monitor and evaluate students' progress.

## MATERIALS

Manufacturer's use and care manuals.

Worker's Compensation Board, printed materials.

WORLD OF WORK
Level 6
A. Specific and Allied Work Skills

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |

The student:

Demonstrates awareness of whom to consult should problems arise.

Demonstrates ability to accept supervision in specific work situations.

## 3. Decision Making

Demonstrates ability to make appropriate decisions in work situations.

## 4. Independence

Demonstrates ability to perform satisfactorily in familiar and unfamiliar work situations.

Create situation where student is forced to seek assistance.

Have a class discussion.

Have a class discussion about what decisions will be required when one is a member of the work force.

Invite guest speaker, e.g. from Chamber of Commerce, local businessman.

Provide opportunities for student to work in a variety of situations.

Monitor and evaluate performance; discuss with student.

WORLD OF WORK
Level 6
B. Career Planning and Exploration

OBJECTIVES
TEACHING STRATEGIES

## MATERIALS

## 1. Why Work

The student:
Demonstrates some financial independence through working.

## 2. Job Awareness

Develops knowledge of variety of jobs and careers available.

Demonstrates knowledge of requirements for practical jobs/careers.

Explores careers through practical experience.

## 3. Job Demands

Demonstrates good work habits.

Demonstrates positive attitude towards work.

Assumes complete responsibility for task.

Demonstrates ability to relate to personnel at school and on the job.

Use work experience program.

Bring in guest speakers from businesses, industries, unions and Chamber of Commerce.

Discuss experience on parttime work.

Go on work experience program field trips in coordination with Work Experience Program.

Have a class discussion.

Role play various situations.

Our World of Work.
C.N.I.B. List of

Canadian Occupations.
Canadian Classification
Dictionary of
Occupations.
Careers in Data
Processing.
Career Awareness.
Occupations 2.
Occupations L.
Program Scope Job
Skills Series.
S.R.A. Guidance Series.

Careers Comparison Kit.
Career Choices for
the 70 's.
Careers Search.
Jobs from 'A to $Z$ '.
Career Clusters:
An Introduction to
Related Occupations.

Good Work Habits. Job Attitudes.

## Level 6

B. Career Planning and Exploration

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| The student: |  |  |
| Maintains personal and <br> other belongings in neat <br> fashion in school and at <br> work. | In work experience setting, <br> emphasize proper care, use, <br> and storage of tools and <br> equipment. |  |
| Demonstrates punctuality. |  |  |

WORLD OF WORK
Level 6
C. Finding a Job

## OBJECTIVES

TEACHING STRATEGIES

1. Awareness of Personal Abilities and Interests

The student:

Identifies a number of vocations for which he is/ is not suited.

Selects two or more areas for work study/experience which are consistent with interests, abilities, limitations.

Identifies jobs/careers which may be of interest to him.

Recognizes personal strengths and weaknesses important in the world of work.

## 2. Awareness of Process

Demonstrates increasing skill in using the telephone.

You Gotta Know Yourself.
Me and Others.
Me and Jobs.
C.N.I.B. List of Canadian Occupations.
Service Occupations.
Looking Into The Future.
Discovering Your
Real Interests.
Social and Pre-
Vocational Information Battery.
Girls and Their Future.
Canadian Classification Dictionary of Occupatio Do Your Dreams Match Your Talents? Janus Job Planner. Talking Handbook of American Occupations. Very Important People Series.

How to Get the Job. Work Experience Manual.
Finding Part-time Jobs.

The student:
Demonstrates knowledge of how to use newspaper "Help Wanted" columns to find a job.

Demonstrates ability to use community and government agencies when looking for a job.

## 3. Personal Contact

Names person(s) who can provide assistance in finding a job.

Develops file of useful contacts.

Demonstrates ability to be interviewed for job placement.

Have blind students use Optacon to read want ads; partially sighted use T.V. reader.

Using several different newspapers, have students collect, locate and display jobs in home town, in another geographical location.

Compile a file on part-time jobs available locally using want ads.

Demonstrate procedures used in answering want ad.

Discuss when to use the want ads; include the advantages and disadvantages and compare by phoning or visiting personnel office.

Discuss ways to find part-time work, e.g. want ads, visits to work place, personal contact.

Have student discuss job availability with school counsellor.

Have student discuss interview with class; compile work diary describing duties of work experience; relate previous experience at the interview.

Using the Want Ads.
Basic Skills on
the Job.

Guide to the Community. Variety of newspapers.

Sign Survival
Poster Program.

Janus Job Interview Guide.
My Job Application File (2nd edition).

WORLD OF WORK
Level 6
C. Finding a Job

OBJECTIVES
TEACHING STRATEGIES

The student:

Demonstrates ability to fill in an application form.

Have student arrange by phone or letter to be interviewed by prospective work experience employer.

Role play interview situation and discuss outcome of interview (successful or not).

Discuss reasons and changes that can be made.

Have students compile a list of interview "do's and don'ts". Include punctuality, speech clarity, manners and appearance.

Invite guest speaker from a local industry to describe the importance of the interview. Have student use Canada Manpower Office to find a job.

Provide practise filling in application forms correctly. Provide blind student with a sighted buddy.

Have students write letters requesting information.

Have students examine various types of letters to compare style, content and layout (partially sighted).

Have blind use Optacon.

MATERIALS

A Job Search Guide. Work Experience Handbook. Accent/The World of Work.
Personal Resume Preparation.
Resumes That Get Jobs: How to Write Your Best Resume.

Forms in Your Life. Forms in Your Future. Actual application forms.
Getting Applications Right.
Apply, Kit M.
Looking into the
Future Booklets.
Applications Forms.
40 Letters to Write.

How Do I Fill Out A Form?

WORLD OF WORK
Level 6
D. Keeping a Job

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| 1. Health and Safety |  |  |
| The student: |  |  |
| Practises safety rules while on the job. | Discuss care of equipment, materials and self on the job. | Occupational Health and Safety Regulations. |
|  | Obtain report from work experience program. | How to Become a Safe Worker . |
|  | Discuss examples of safety/ health regulations applied to specific jobs. | Questions About Compensation Benefits Answered. |
|  | Review questions about compensation benefits. | Attitude Safety Posters. |
| 2. Know1edge of Work Habits |  |  |
| Practıses responsible work habits on the job. | Have student participate in work experience program. <br> Discuss the challenge of a real job. | Don't Get Fired: 13 Ways to Hold Your Job. How to Hold Your Job. Steady Job. Reference Manual for Office Personnel. |
|  | List and discuss the difference in expectations between school and the world of work, e.g. working without supervision. | Learn to Earn. |
| 3. Interpersonal Relationships |  |  |
| Demonstrates ability to get along with people in a variety of situations, e.g. school, community, job. | Have a class discussion. | How to Survive on the Job. <br> Sign Survival <br> Poster Program. |
| Demonstrates knowledge, awareness and acceptance of individual differences. |  | Path - Positive <br> Attitudes Toward <br> The Handicapped (kit). |

WORLD OF WORK
Level 6
E. Worker's Rights

The student:
Demonstrates understanding of the worth of work.

Respects the rights of others.

Demonstrates understanding of special rights under protective legislation, e.g. Dependent Adults Act.

Demonstrates understanding of work legislation, e.g. social insurance, unemployment insurance, minimum wage, workers' compensation.

Demonstrates how to utilize community services related to workers rights.

Demonstrates understanding of unions and their functions.

TEACHING STRATEGIES

## MATERIALS

Invite guest speakers from Services for the Handicapped and the office of the Public Trustee.

Have a class discussion.
Invite guest speakers from Unemployment Insurance Commission, Board of Industrial Relations.

Invite guest speakers from local unions.

Mack Works in a Clothing Factory.

Legislation Pamphlets (Alberta Labor).

## 1. Care

The student:

Organizes closet and drawer space appropriately.

Utilizes laundry facilities independently.

Demonstrates ability to make necessary repairs.

## 2. Selection

Chooses clothing suitable for work or leisure.

Chooses style, color and design appropriate to the individual.

Demonstrates choice of appropriate accessories.

With assistance, shops for clothing.

Demonstrates understanding of guarantees and warranties

Demonstrates knowledge of what to do with substandard goods and services.

Demonstrates understanding of variation of quality, quantity and price in the market place.

Have a classroom discussion.
Contact resource person:
Rehabilitation Teacher from
C.N.I.B. to work with home economics teacher and student.

Make student responsible for organizing and maintaining classroom space, and for making minor repairs.

Have a class discussion about dress standards.

Go on field trip to shop. Make appropriate use of sighted guide.

Discuss suitability of newest fashions.

Go on field trips to department stores, speciality shops.

A Step-By-Step Guide to Personal Management for Blind Persons, 2nd edition.

Towards Independence. Lessons in Living.

All About Clothes.

Materials from
Department of
Consumer and
Corporate Affairs.

Teen Guide to
Homemaking.

Level 6

## A. Clothing

The student:

Recognizes and compares regular and sale prices.

## 3. Construction

Demonstrates ability to use sewing tools and machines.

Sews more complex garments.

Selects appropriate patterns, materials and accessories.

Identifies and carries out various methods of construction.

TEACHING STRATEGIES

Have a classroom discussion.

Go on field trips to shop and compare.

Provide classroom experience with machines and tools.

Invite guest speaker: partially sighted/blind person to discuss use of and possible adaptation of machinery with students and teachers.

Provide on-going experiences in Home Economics class.

Have blind/partially sighted use sighted guide when appropriate.

MATERIALS

Clothing and Textile Education.

Sew It Yourself.

Sewing Teachniques for the Blind Girl.

So What About Sewing. Sewing Manual.

| OBJECTIVES |  |  |
| :--- | :--- | :--- |
| T. Shopping |  |  |
| The student: |  |  |$\quad$| MATERIALS |
| :--- |

Recognizes that false advertising occurs.

## 3. Preparation

Demonstrates ability to use kitchen tools, appliances and facilities independently.

Plans and prepares menu for formal occasion.

Prepares meals including special dishes.

Demonstrates ability to follow more complex recipes.

Agencies that provide information free of charge:
Calgary Milk Foundation; Alberta Milk
Foundation; Nutrition Communication, Ontario Milk Marketing; General Food Corporation. Food Buymanship. Department of Foods and Nutrition. Food and You.

How You Plan and Prepare Meals.
Cooking Without Recipes. The James Bears Cookbook. Simple Cooking for the Epicure.
Beyond T.V. Dinners: 3 Levels of Recipes for Visually Handicapped Cooks.
Preprimer Cooking or Cooking Techniques for the Blind. Better Homes and Gardens Cookbook Series.
Ask Your Neighbor.
Betty Crocker's Cookbook.
Amana Braille.

OBJECTIVES

The student:

## 4. Serving

Demonstrates ability to serve family and guests.

Demonstrates appropriate etiquette in a variety of settings.

## 5. Preserving

Describes short and long term storage methods.

## 6. Production

Explains or describes in detail production, processing and distribution of:

- garden products
- dairy products
- grain products
- fishing products.

TEACHING STRATEGIES

Have student plan and prepare a lunch at school and invite another class as guests.

Provide on-going experiences in Home Economics class.

Have a class discussion about storage. Use brailled containers for blind, and if necessary large print for partially sighted.

Go on field trips to various types of farms, distributors, commercial food processing plant, supermarket.

Discuss complete processing of food.

Cooking Without
Recipes.
Microwave Cookbook.
The Cook's Companion.
Birdseye Frozen Food.
The Teenagers Menu
Cookbook.
Recipe. Book.
Cooking for Two.

## MATERIALS

Social Competency.

Family Meals and Hospitality.

Food Freezing at Home. Ten Short Lessons in Canning and Freezing.

HOME MANAGEMENT
Level 6
C. Maintaining the Home

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| 1. Selection |  |  |
| The student: |  |  |

Chooses specific home design and explains choice on basis of contruction, location, design and budget.

Invite guest speakers from tax department, real estate, interior design, visually impaired person who lives successfully in his own apartment.

Take field trips with appropriate use of sighted guide.

Demonstrates understanding of responsibilities related to neighbors, landlords, community.

Demon'strates ability to use lewspapers and other ad?ertising to locate housing.

Demonstrates knowledge of income assisted housing.

## 2. Furniture and Furnishings

Chooses furnishings for cost, style and durability.

Identifies "harmony" in color, texture, style.

Have student create model home, then price furnishings to arrive at a realistic approximation of cost for his project, with the help of sighted person if appropriate.

Invite guest speaker from Landlord and Tenant Association.

See Citizenship and Iṇdividual Responsibility section.

Have student use media with appropriate use of sighted guide. Have total blind use optacon, partially sighted use T.V. Reader.

Have student plan a hypothetical budget for various types of families and wage earners and ask him to select housing in reference to that budget.

So You Want To Buy A House.
Teen Guide to
Homemaking.

The Home, It's Furnishings and Equipment.

## 3. Care and Maintenance

The student:

Demonstrates efficient methods of performing daily household tasks.

Demonstrates knowledge of cost of household repairs and need to get estimates.

Demonstrates increasing skill in using tools.

TEACHING STRATEGIES

Contact resource person:
Rehabilitation Teacher from C.N.I.B.

Elicit cooperation with family to encourage increased independence at home.

Contact resource persons:
plumber, electrician, welder, etc.

I Hate to Housekeep Book. How Does It Work?
Popular Mechanics.
Home Repairs Any
Woman Can Do.
How to Repair
Electrical Appliances.

HOME MANAGEMENT
Level 6
D. Child Care

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: <br> Babysits, assuming complete responsibility. |  |  |
|  |  |  |
| Demonstrates ability to dress, change, feed infant or child. | Provide practice on dolls brought in from St. John's Ambulance Courses, Fire Department. | Community League Babysitting Course. Caring for Kids. Baby-sitters Handbook. |
|  | Go on field trips to carefully selected day care and Mothers Day Out and Early Childhood Services Centers. <br> Have a class discussion on nutritious snacks. |  |
| Demonstrates ability to make decisions about bedtime or snacks for children. |  |  |
| ```Identifies what to do in an emergency, e.g. injury, fire, theft.``` | Discuss procedures to be followed in the event of injury, fire, theft. | First Aid in Illness and Injury. |
|  | Contact resource persons, e.g. policeman, fireman, St. John's Ambulance personnel. |  |
| Demonstrates ability to show love, warmth and respect for children and | Elicit cooperation from parents to allow student to assume responsibilities he can | Exploring Home and Family Living. |

TEACHING STRATEGIES

## MATERIALS

The student:
Demonstrates knowledge of sources of income other than wages, e.g. family allowance, welfare payments, unemployment insurance, assured income.

Identifies factors that affect wages,
e.g. training, time, danger, seasonal.

Calculates money earned:

- gross/net pay
- regular/overtime
- hourly, weekly, monthly, annually
- double time, time and a half, holiday pay.

Reads, interprets and demonstrates understanding of terms and figures on cheque stub, e.g. union dues, unemployment insurance, C.P.P.

Demonstrates understanding that the value of money changes over time, e.g. inflation.

Invite guest speaker from Unemployment Insurance Commission, Social Services.

Bring in guest speakers from Manpower personnel, business manager, etc.

Have students examine and discuss salary stubs (braille or large print samples if appropriate). Compare different cheque salary stubs to see similarities, differences. Discuss the meaning of these terms.

Mathematics for Citizenship.
Mathematics for Everyday Living. Mathematics for the Worker. Mathematics for Employment. Getting Ready for Payday.
Money Management.

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :---: | :---: |

The student:
Compares and contrasts buying through different outlets, e.g. retail, wholesale, mail order.

Describes examples of misleading advertising on television, radio, newspaper.

Calculates bills accurately.

Demonstrates understanding of comparative shopping (goods and services).

Develops budget for household inanagement, e.g. grocerís, clothing, utilities.

Calculates personal budgets for different family sizes and over varying time periods for:

- casual worker
- full time worker
- unemployed worker.

Explains what a credit purchase is.

Writes/brailles list of goods and services that can be bought on credit.

Invite guest speakers, e.g. retailer, wholesaler.

Use T.V., radio and printed advertisements to detect examples of misleading advertising. Examine recent copies of Canadian Consumer.

Provide talking calculator, Optacon or T.V. Reader if required.

Discuss budgets developed by students.

Provide budgets and cost data (braille or large print if appropriate) so that student can make appropriate decision as to what to buy.

Use role playing.
Have family discuss needed cutbacks in personal spending after layoffs.

Work out budgets (week, month, year) with items clearly indicated.

Gyps and Frauds.
Case Study Booklet 2. The Advertisement Book.

Let's Go Shopping. Mathematics for Adult Living. Money and the Kids: How to Earn It, Save It and Spend It.

## MATERIALS

The student:
Demonstrates understanding of the cost of using credit.

Demonstrates understanding of the rationale for paying bills on time.

Calculates the cost of different methods of payment.

Demonstrates understanding of the responsibility associated with credit buying.

Demonstrates understanding of concept of guarantee/ warranty.

Utilizes Better Business Bureau and Consumer Protection groups.

Have a class discussion.

Have students bring in parents' utility bills to discuss payment re: due date, penalty for late payment.

Invite guest speaker from debt court, or Consumer and Corporate Affairs, to discuss what happens when bills are not paid on time.

Discuss examples of borrowing in the family and effects of borrowing on family members.

Have student calculate payments due on a given loan period and equate this to given wages or find out how to get this information.

Have student compile list of goods and services protected under warranty. Compare warranties, e.g. five brands of washers, cars, etc.

Calculates cost if any if warranty is used.

Invite guest speaker from Better Business Bureau.

An Annotated List From Alberta Consumer and Corporate Affairs (Alta. Ed.).
Dollars and Sense.
A Guide to Family Money Management. Math for Employment, Parts 1 and 2.
Math for the Worker.
Math for Banking.
Math for Adult Living. How to Read Guarantees, Warranties, Tabs and Labels. It's Your Money!

Bank Account.
The Bank Book.

Mathematics for Adult Living.

Royal Bank materials.

Level 6
A. Fundamentals of Movement
e student:

## Gymnastics

Participates in the follow-
ing forms of gymnastics:

- tumbling/floor exercises
- uneven bars
- box horse
- balance beam
- rings
- parallel bars.

TEACHING STRATEGIES

Note: The major physical education goals of skill development, fitness development knowledge and appreciation of games and sport apply equally for the sighted and visually impaired. To achieve these goals the blind student can be directly integrated into many activities while others require minimal adaptations and still others are usually contraindicated.

The selection of appropriate physical education activities should be based on several important considerations:

1. Any adaptation to equipment.
2. Accessibility to required facility.
3. Safety.

Note: Safety is a most important consideration in gymnastics for the blind. The student must have basic conditioning so he has the required strength and endurance. Constant supervision and spotting help avoid accidents.

## MATERIALS

Adapted Physical Education and
Recreation: A Multidisciplinary Approach.

MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES
Level 6
B. Games and Activities

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| Dance |  |  |
| The student: |  |  |
| Participates in the following dance forms: <br> - creative/modern. <br> - square <br> - folk <br> - round <br> - jazz <br> - ballroom. |  | Modern Dance. Dance Awhile. |
| Games |  |  |
| Participates in selected games from the following categories: <br> - racket <br> - target <br> - relay. | Note: For the visually impaired racket and target games are not usually recommended; however, many blind students enjoy target games like archery, bowling and horseshoes because of the social aspects of participation. These games are easily adapted for the blind. The selection of an activity should be guided by suitability and interest of the student. | Movement Without Sight. <br> Physical Education for Blind Children. Active Games for the Blind. |
| - team (goal ball, soccer, hit-in baseball, California kick baseball, hockey). | Note: Team games generally involve a ball (or object) being advanced toward a goal by one team against an op- | Staley Sports Kit. <br> Audible ball. |

Swimming

The student:

Demonstrates fundamental swimming skills.

Participates in:

- water games
- diving
- canoeing
- sailing
- synchronized swimming
- water safety activities.


## Track and Field

Demonstrates the ability to:

- distance throw (shotput, discus, javelin)
- long jump
- high jump
- run (a11 distances, cross country).


## Outdoor Pursuits

Wherever possible, demonstrates basic skills in the ODPU activities:

- camping
- orienteering
- hiking
- cycling
- skating

TEACHING STRATEGIES

Have blind swimmer swim by the wall of the pool to help keep his direction.

In competitive swimming, warn the blind swimmer, e.g. tap with cane, before he reaches the wall so he won't strike his head.

Have blind student participate in other aquatic activities with a sighted "buddy".

No modifications necessary.

Use guide wires or the international system of calling: 3-left, 4-centre, 5-right of lane, or tandem partner running using a short rope between the two.

Use sighted "buddy".
Use braille compass.

Use tandem.

Swimming for the Handicapped, Instructor's Guide.

Aquatics for the Handicapped.

Swimming for Children with Physical and Sensory Impairments.

Physical Education and Recreation for the Visually Handicapped.

Physical Education and Recreation for the Visually Handicapped.

MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES
Level 6
B. Games and Activities

A. Music
"In the area of music, visually handicapped children - contrary to lay belief are not gifted merely as compensation for blindness." 1
"... of all the avenues of communication open to the blind child, music is one of the most significant and thus of incalculable value. ... His auditory and tactile senses permit him to relate to music as a listener or a performer, and these experiences afford him many opportunities to participate on an equal footing with his sighted peers. " 2

The music curriculum for elementary schools developed by Alberta Education (1977) is suitable for use with visually impaired students. Since no music curriculum has been developed for either Junior or Senior High Schools, the visually impaired student should be integrated into the school's existing music program.

The following suggestions should be incorporated by the music teacher to assist her in successfully integrating the visually impaired student into her program.

## Rhythm Band

> "Benefits derived from rhythm bands are the same for normally seeing as for visually handicapped students. However, teachers must assume responsibility for acquainting students with every instrument - the sound of it, how it feels in the hand - because otherwise each student will acquire only a limited knowledge about the instruments played by other students.

If the teacher points or gestures to indicate when students should or should not play, blind students will not receive such signals; therefore, teachers must adopt audible cues."

## Identification of Instruments

To facilitate recognition of tone quality, teachers should play instruments or use recordings, thus familiarizing the students with identifiable and characteristic sounds. Awareness that a voilin sounds like a voilin and not like a tuba is the lesson objective. A second step is to allow visually impaired students to handle and examine all the instruments. If the teacher plays a recording of a clarinet, students should have an opportunity to examine a real clarinet in class.

Instruments in a given family, e.g. strings, should be compared for sound, size, number of strings, position held when played, etc. Since experimentation is a channel for learning, the student might hold a string while it is being bowed and note the difference when he removes the finger. Also, differences between heavy and thin strings should be explored. How does the performer achieve legato and staccato effects?

Combinations of instruments can be introduced once the students have become acquainted with individual instruments. If live performers can be utilized, they might place themselves in various parts of the room so that the individual sounds can be more easily distinguished. In this exploratory stage, the human voice - alone and in combinations - should also be included. Having felt vibrations in other instruments, the students might feel vibrations in their throats and diaphragm.

## Music and Self-Expression

Self-expression to the accompaniment of music is desirable for all students. Blind students, however, may be limited in their experiences when required to depict certain behaviors, as when the teacher says: "Pretend you are a bear and walk like one", or "Make believe you are a daisy blowing in the breeze". Therefore, blind students must be shown how to perform the intended action. The teacher might try to draw out ideas rather than impose them. She might say: "Listen to the music, and then make your feed do what the music seems to say", or "What do you think your arms want to do with this kind of music?". Under these conditions, visually impaired students experience no disadvantage.

Some blind students are reluctant to move out or do so only awkwardly or fearfully. Because of this, teachers might request them to "act out the music" right where they are. If students learn enough freedom and confidence while staying in one place, they may learn, though belated, how to move in an enlarged area.

## Music and Dance (Eurhythmics)

Eurhythmics involves following a prescribed pattern imposed by the teacher or choreographer. Students learn to coordinate body parts and work toward independence of separate members. Eurhythmics yields gains in muscular control and coordination, grace, poise, and self-confidence. However, more modern methods of rhythmical gymnastics give greater freedom of movement, encourage more self-expression through body movements.

## Music Notation in Braille and Large Print

If sighted students are expected to read music notation on the staff at a given grade level, partially sighted students at that time should also have such competence in enlarged form. Teachers can use either specially prepared sheets with the enlarged staff adding notation by hand, or can purchase ready made enlarged sheet music if the desired title is available (see Note).

Occasionally a given community may have a sighted music teacher who knows braille music notation or a blind teacher of music with whom the student and his family might arrange private lessons for both notation and performance.

Visually impaired students, their parents, and their teachers must not jump to conclusions that careers in music are guaranteed and automatic. Frequently the presence of musical talent is overestimated. Interest and enjoyment are not enough to launch a career. Countless hours of arduous and lonely practice are imperative.

Visually impaired students in music have one of three choices if contemplating a musical career:

1. Serious music based on use of notation and exactly prescribed performances.
2. Popular music, which calls for the development of a personal style distinctive from that of other performers. If the visually impaired musician has a good ear for reproducing what he hears in live or recorded performances, he may have little or no need for notation itself.
3. Teaching music, which is similar to choice \#l, though it does not demand performance in concerts.

The student using braille notation must memorize it before being able to play it. This consumes much time and restricts the performer's repertory. Unlike a sighted person, who can do a reasonably accurate job even on his first exposure to a musical composition, the braille reader cannot "sight read" music. Partially sighted students have similar difficulties. Because of their visual problem, they may not be able to read quickly enough to read and play simultaneously; so they may have to memorize also. Furthermore, the partially sighted may need to use a special music rack that brings the sheet close to the face so that it can be read.

It is hoped that the persistent will sell themselves on the quality of their musicianship and not on their blindness.

## Attending Professional Concerts

Although attending live performances has the same values for both visually impaired and their sighted peers, one difference lays in the inability of the former to read program notes distributed to the audience. There may not be sufficient time before the performance to allow a sighted person to read in whispers. Without these notes, the listener misses vital information pertaining to historical setting or analysis of art form. To correct this problem, teachers might secure advance copies of the program - often advertised in newspapers - and then play the same compositions at school, discussing pertinent information. A culminating experience might involve listening again to the same compositions after the concert and sharing reactions to the live performance.

Group Participation (Chorus, Orchestra, and Band)
Visually impaired students should be encouraged to assume active memberships in school organizations devoted to music. This type of integration with sighted peers may result in lasting friendships beyond the school year, in vocational channels (Bevan, 1965) and in keys that unlock social doors making possible broader interpersonal relationships. Some modifications are necessary, as outlined in the following paragraphs.

Processions and Recessions: Moving in straight lines equidistant from those in front and behind is important for aesthetic effects. If a blind student is paired with a sighted partner, they might link little fingers of adjoining hands in an inconspicuous way. An understanding teacher might have students proceed by twos instead of in single file when a blind student is a member of the group. When required to go in single file, a blind student might use a thin string held taut by the student preceding and following him with the string wrapped around his own finger halfway between the two. Being confronted with new territory poses the problem for blind students of not knowing distances or turns or the presence of steps, since rehearsals may be conducted in one place while the public performance is held elsewhere. If possible, arrangements should be made to take the blind student to the new site in order to orient him to it.

Marching Band: Partially sighted students may succeed as participants in a marching band, whereas blind students might find it extremely difficult to keep in line while marching and playing. However, blind students should be permitted to try doing it in rehearsals. Perhaps blind students can orient to a particular sound preceding them, such as a drum or flute.

Pairing with Partner: In chorus, band, or orchestra, visually handicapped students might be placed beside a capable musician singing or playing the same part. Such partners can serve as examples to emulate. In rehearsals, blind students can listen part of the time and later sing or play when the material has become familiar. The pair might work at times other than during rehearsals with the sighted performer playing or singing the part for the other to listen to and learn. When several persons make up a given section (such as tenors), the blind student should be seated in the front of the group so that more of the sound of his part reaches him.

Use rif Recordings: If a student group is practising a given composition already rec rded by another group and with the same arrangement, visually handicapped studeats might be assigned to study by listening repeatedly to that recording. Furthermore, the Division for the Blind and Physically Handicapped, Library of Congress, is producing kits containing sound recordings with music in usual renditions, also at a slow rate for study purposes, with solos unaccompanied, and with notation in both braille and large type. These materials can be of utmost value if the teacher's selection and the titles thus made available coincide.

Signaling: Music teachers who are not accustomed to having a visually handicapped student in the group may need to modify their signaling procedures. A nod or hand gesture will not be noted by him. Instead, a code of raps with the baton on the music stand might be devised.

Blind Soloist and Accompanist: Although use of the voice may be correct, blind soloists may need assistance with stance, facial expression, and gestures. If the soloist is blind, he can usually take his cue from the accompanist and the musical introduction, if there is one. If the accompanist is blind, he must be certain that the soloist is ready before beginning the introduction." 3

Note: The Materials Resource Centre, Department of Education, Alberta, has enlarged the sheet music available to Elementary Music teachers as part of the Edmonton Public School Board Music Curriculum. A teacher requiring music in large print should contact the itinerant teachers or provincial consultants for the visually impaired.
"Frequently only the words of a song need to be brailled. In fact, often memorization will suffice and no brailling is necessary." 4

1 Music for Visually Handicapped Children, Napier, Grace. The Visually Handicapped Child in the School. Toodenough, Forrest and Dorothy. Education of the Visually Handicapped, $V_{2} N_{1}$, p. 28, March, 1970.
Music for Visually Handicapped Children, Napier, Grace. The Visually Handicapped Child in the School.
4 Your School Includes a Blind Student, Willoughby, D., Lansing, S., Barber, M., Maurer, P. National Federation of the Blind Teachers Division, p. 18.

FINE ARTS AND INDIVIDUAL EXPRESSION
Level 6
B. Art

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: |  |  |
| Demonstrates awareness of the power and scope of line, texture and value as individual elements and as elements in a total composition drawing. | Few adaptations needed for the partially sighted. Blind could use different substances in which to dip stick, pencil, etc., e.g. white glue to enable them to feel their lines. Also make use of foil paper. Have students study the variety of line, pattern, shapes and colors found in the world. | Junior High School <br> Art Curriculum Guide. <br> Junior High Art Guide. <br> Creative Drawing - <br> Print and Line. <br> Form, Space and Vision (2nd edition). Drawing: Ideas, Materials and Techniques. Art Fundamental Theory and Practice. |
| Demonstrates awareness of the forces of line, shape and color, through tactual experiences using a variety of materials and media (painting). | Provide opportunity for the blind and partially sighted students to identify tactually, explore and use the various tools and materials to understand how they contribute | Junior High Art Guide. Brush and Pallette. Painting in the Classroom. <br> Imaginative Techniques in Painting. |

Demonstrates ability to create three-dimensional forms in such a way that understanding the spatial elements and textural and line qualities is promoted (sculpture).

TEACHING STRATEGIES
MATERIALS

The student:

Demonstrates understanding of the potentialities of synthetic media.

Demonstrates ability in the various techniques of working with clay, decorating and of firing (ceramics and pottery).

Avoid direct experiences with fibres.

Provide experiences in the following:

- painting: texture, transluscent, acrylic sheets, cellulose, joint filler
- sculpture: modelling paste, acrylic sheets, cellulose, joint filler
- graphics: collotypes, etching, cellulose, joint filler
- mosaics and stained glass effects: grout, leading, tesserae, laminations
- textiles: stencil method, painting method, batik method
- wall hangings
- etching and engraving
- carving: styrofoam, urethane.

Note: All students must learn what tools and equipment may be utilized and how to handle and care for them.

Have a class discussion on the cultural influences on the ceramic arts.

Use demonstration of basic techniques, e.g. wedging, texturing and provide information on storage and decoration of the following:

- pinch and coil pots
- applique, 5 graffito, cameo, resist
- glazing and firing procedures
- slab pottery

Junior High School Art Curriculum Guide. Plastics as an Art Form.
Sculpture in Plastics. Painting with Synthetic Media.
Polymer Painting. The Rainy Day Book. Recipes for Art and Craft Material.

Junior High School Art Curriculum Guide. Ceramics, A Potter's Handbook.
Making Pottery Without a Wheel. The Complete Book of Ceramic Art. Pottery and Ceramic Sculpture.

FINE ARTS AND INDIVIDUAL EXPRESSION
Level 6
B. Art

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :---: | :---: | :---: |
| The student: | - forming clay over objects, e.g. bowls <br> - ceramic jewellery <br> - ceramic tiles <br> - uses of grog <br> - ceramic sculpture. |  |
| Demonstrates ability to experience progression of ideas and skills in printmaking. | Texture the ink or glue that is used in all techniques of printmaking with sand, sawdust, etc. Make textured | Junior High Art Guide. Creative Printmaking. Relief Printmaking. |

Demonstrates awareness of how color and textural effects may be achieved and employed in a decorative manner (fabric and fabric decoration).

The student:
Demonstrates ability to focus complete attention on a specific exercise.

Demonstrates ability to express himself through movement.

Demonstrates awareness of the five senses.

Demonstrates increasing ability to communicate sensory experiences.

Have students maintain focus during exercises: dance, improvisation, speech exercises, monologue, two character scent, poetic reading.

Use scripted exercises: style, technique, research, technical assignment and character analysis.

Use basic routine of exercise for relaxation, stimulation, warm-up. Include:

- basic stage positions
- choreographed blocking
- accommodation of movement according to the needs of character portrayal
- motivation for movement
- space, time, rhythm, dynamics.

Have students develop sensory recall through observation, pantomime, to enhance communication and comprehension abilities.

Develop emotional recall through using Stanislovski's method approach.

Teach student to develop and retain illusions of believability.

Curriculum Guide for Drama.
Training the Speaking Voice. Nobody in the Cast.

Stage Make-up. The Handbook of the Theatre.
Fundamentals of Play Directing.

A Handbook of Stanislovski.

The student:

Demonstrates awareness of the more subtle aspects of the physiological processes of voice production.

Demonstrates ability to coordinate language, body and voice for effective communication.

Demonstrates ability in the areas of improvisation, characterization and acting.

Have students interpret and learn characters' lines to recreate thought, factual meaning subtext, motivating desire, cues, topping, ad-lib, energy, tempo, stage whispers, laughing, crying.

Discuss basic physiology of voice, e.g. breath control, projection, articulation, pronounciation, resonance rate, inflection, pitch intonation.

Use monologues, speeches, interviews.

Stress importance of oral interpretation for expression, impression, imagery, phrasing, pauses, visualizations in monologue speeches, Reader's Theatre.

Have students plot elements into improvisations, e.g. exposition, conflicts, rising action, climax falling action, resolution.

Have student write scenarios for improvisations, media shows, shooting schedules, film with voice over.

Do character analysis showing internal/external qualities, motivation, character in play, type of play, style form, mood, theme, plot, structure.

Have student practise character acting, e.g. protagonist, antagonist, supporting.

Improvisation Discovery and Creativity in Drama. Oral Interpretation.

Concise History of the Theatre.

Scene Design and Stage Lighting. Teaching Drama.

Improvisation for the Theatre.
Basic Drama Projects.

OBJECTIVES

The student:

Demonstrates understanding of director's purpose.

Demonstrates ability to organize a play production.

TEACHING STRATEGIES

Have student act in comedy, comic sense, visual sense, double-take, timing pace, restraint.

Have student act in tragedy and other non-comedic roles for characterization, control, internal motivation, simplicity, universality.

Have student show internalization of script through use of memorization, unit memorizing, over learning lines, speed drills.

Select and analyze scripts, prompt book.

Teach stage composition, blocking for emphasis, balance, variety, unity.

Through on-going classroom experiences acquaint student with: tryouts, casting, backstage crew, stage manager, assigned responsibilities, rehearsal schedule, rehearsal by units, performance schedule, theatre etiquette.

Teach advantages and disadvantages of staging arena, proscenium style and other attendant problems of lighting and blocking.

## MATERIALS

Voice and Speech. Development in Drama.

Leap to Life.

Demonstrates understanding of theatre history.

Demonstrates ability to use constructive dramatic criticism.

Provide students with experiences in the following areas: auditorium/studio requirements, stage terms, stage equipment, power and hand tools, scenery building, scenery design, types of scenery.

Have students become familiar with basic lighting terms, running production, cue sheet, prompting and crew responsibilities.

Have a class discussion.
Use films and books on Greek, Roman, Italian, Spanish, Renaissance and Commedia del Arte, Elizabethan, French Renaissance, Restoration, 19th Century Continental and America, 20th Century.

Have a classroom discussion on dramatic criticism; define it.

Discuss classroom critics, professional critics and critics ethics.

Use class and individual critiques of film, ballet, opera.

Discuss audience etiquette.
Have touring artists/actors/ companies visit school, pre and post tour.

Go on field trips to live theatre.

FINE ARTS AND INDIVIDUAL EXPRESSION
Level 6
C. Drama

The student:
Demonstrates appreciation for dramatic literature through a variety of dramatic productions.

Demonstrates understanding of the use of make-up and costumes.

Have students discuss basic principles of straight and character make-up, and duties of the make-up crew. Practise where appropriate.

Have students discuss costume requirements, design, line, fabric, color decoration and the duties of the costume crew.
D. Leisure Time Activities

Many of the games and activities listed in Levels 4 and 5 are suitable for Junior and Senior High School students. In addition the following games and activities may be included:

- whist
- bridge
- canasta
- poker
- solitaire
- woodwork
- leatherwork
- sculpting.

The list of active recreational pursuits listed in Levels 4 and 5 may be expanded by adding the following:

```
- weightlifting - rowing and canoeing
- diving
    - golfing
    - archery - curling.
    - target shooting
```

The visually impaired student at the Junior and Senior High School level should be encouraged to participate fully in all social activities in the school such as clubs, dances, student council, year-book, productions, plays, etc.

## MATERIALS

The student:

Demonstrates awareness of changing types/roles of the family in society.

Assumes roles and responsibilities associated with being an independent adult.

Demonstrates responsible attitude towards property of self and others.

Identifies and utilizes strategies for coping with change.

Demonstrates understanding of how to use community agencies appropriately.

Participates in community in a variety of roles.

Utilize discussion of roles, e.g. employees, consumers, participants in recreational activities.

Parenting.
Marooned.
Family Life.

The student:
Demonstrates respect for the personal property of others.

Participates in decisions regarding rules.

Identifies privileges and consequences associated with school rules and routines.

Accepts responsibility for own behavior and duties appropriate to age.

Assumes a delegated or elected position of authority in a responsible manner.

Utilize class discussion.

Assign or elect students to positions of authority; have them work cooperatively on responsibilities of the position.

## OBJECTIVES

TEACHING STRATEGIES
MATERIALS

The student:
Identifies federal agencies.

Demonstrates ability to locate and utilize government services.

Demonstrates understanding that diplomatic and trade relationships vary between countries.

Assumes responsibility within community.

Demonstrates knowledge of the groupings of countries and the power blocks within the world.

Demonstrates awareness of cultural differences throughout the world.

Demonstrates understanding of legal rights and responsibilities.

Demonstrates understanding of the responsibilities of each level of government.

Go on field trips to federal buildings; invite guest speakers such as: people from manpower, department of transport.

Have students apply for Social Insurance Numbers.

Invite resource person from C.N.I.B. to discuss how visually impaired people obtain information.

Discuss unique characteristics of specific countries, re: passports, visas, ease of travel, and trade relations.

See Social Studies section.

Involve students in multicultural fair. Discuss language customs, currency, music.

Go on a field trip to Court.

Have a panel discussion with representatives from each level of government.

Hold mock parliament elections in classroom.

Materials from Department of Trade and Tourism.

CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
Level 6
C. Community and Country

| OBJECTIVES | TEACHING STRATEGIES | MATERIALS |
| :--- | :--- | :--- |
| The student: |  |  |
| Demonstrates awareness and <br> understanding of federal <br> rules and laws. | Invite guest speakers, <br> e.g. lawyers, judge, R.C.M.P. |  |
| Demonstrates understanding <br> of the need for passports <br> and visas when travelling. | Discuss difference between a <br> passport and a visa. <br> Invite guest speaker from <br> Federal Department of Immigra- <br> tion. | Materials from <br> Department of <br> Immigration. |


| OBJECTIVES |
| :--- |
| The student: |
| Identifies major news <br> stories: local, provin- <br> cial, national, inter- <br> national. |

See Social Studies section.
Set up depate, e.g. political issues.

Set up class, school newspaper.

Take field trip to local newspaper, television station.

Invite guest speaker from media - newspaper reporter, meteorologist.

MATERIALS

CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
Level 6
E. Environmental Education


Level 6
E. Environmental Education

## 4. Pollution

The student:
Demonstrates correct disposal methods, e.g. napkins, dish water.

Demonstrates knowledge of the regulations in existence to protect the environment.

Recognizes his right to speak out if he sees an environmental offence that affects his enjoyment of nature or his health, e.g. smoking.

Examines fields of work that is carried out in the natural setting, e.g. landscape worker, tree nursery worker, lumber or forestry worker.

TEACHING STRATEGIES

Arrange a camping trip of an overnight duration to practise many of these principles. Involve a few parents.

Have students examine city by-laws governing noise, weed control, waste disposal and apply to his specific life situation.

Show films from the National Film Board dealing with the topic of career exploration and choice. Provide explicit description.

Go on field trip to industries relating to the environmental field to expose the student to real life situations.

Arrange a career day/week and invite visitors to come into the school to talk about their jobs and to answer questions on the spot.

Assist student to locate in the Dictionary of Occupations the environmental health hazards inherent in various jobs, e.g. mining and blacklung.

## MATERIALS

Canadian Classification
Dictionary of
Occupations.
Salary and Wage
Rate Survey.

CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
Level 6
E. Environmental Education

The student:

Demonstrates knowledge of environmental service industries.

Demonstrates awareness of the dangers of industrial noise, and an understanding of preventative measures.

## 5. Conservation

Practises various methods of conservation, e.g. recycling paper.

Given a choice of two equal products opts for the one with fewer negative environmental effects.

Demr, nstrates an awareness of energy-saving innovations in the transportation industry and public responsibility to support these innovations.
6. Safety

Demonstrates ability to practise survival methods.

Practises water safety, e.g. swimming and boating.

Demonstrates competency and safety in the performance of several out-of-doors activities about the home, e.g. use of the lawn mower, care and use of a rototiller, proper use of a step or extension ladder.

During industrial education program have student practise small engine repair and maintenance.

Invite the school caretaker to instruct the student in proper use of the lawnmower.

The student:

Demonstrates responsible behavior in parks, etc.

Demonstrates knowledge of possible dangers of various terrains.

Have a discussion about risks involved in travel on frozen lakes, icy roads, etc.

APPENDIX A

OVERVIEW
VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS <br> A. Knowledge of Self <br> 1. Personal Characteristics/ Self Identification |  |  |  |  |
| Demonstrates understanding of the use of names. p. 166 <br> States full name, age, address and telephone number. <br> p. 166 | States/writes/brailles: name, age, address, telephone number. p. 228 | States/writes/brailles: locality, province, country, ethnic background, ages of family members, birthdate, class, room-number. p. 309 |  |  |
| States names of family members. p. 166 | States name of school, names of family members. p. 228 | Identifies extended family relationships. p. 309 | Identifies significant public figures and the office held (Mayor, Premier). p. 370 |  |
| Calls significant persons by name (family, class-mates, friends). p. 166 | Identifies self in photographs, family members by sight or in photo, (partially sighted) boys and girls by names, property by appropriate print/ orailled labels. p. 228 | Identifies significant others by physical and behavioral cues. $\text { p. } 309$ | Identifies self from descriptions by others with regard to physical characteristics and behavioral characteristics. p. 370 | Identifies the need and function of self-identifying information, e.g. I.D. number, social insurance number. p. 438 |
| Identifies things which he likes and does not like to do. p. 166 <br> Identifies things which he does well. p. 166 | Identifies some areas of strength (things he can do well) and some areas of interest. p. 228 | Identifies, demonstrates or describes some interests or preferences, abilities or talents, e.g. sports, arts, cooking. p. 309 | Identifies or describes an increasing number of interests or preferences, abilities or talents. p. 307 | ```Relates personal interests, abilities, limitations to vocational and other selection of activities. p. }43``` |

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Recognizes that people are either male or female. <br> p. 167 <br> 3. Emotional Self | Demonstrates understanding of own sexuality. <br> p. 230 | Identifies sex differences between males and females, including appropriate identification of primary and secondary sexual characteristics. p. 310 | Identifies physical sex changes and feelings arising from awareness of sexuality. p. 371 | Demonstrates understanding of intercourse, pregnancy, birth, veneral disease, birth control. p. 438 <br> Practises appropriate public sexual behavior. p. 439 |
| Identifies specific emotions in self and others. p. 167 | Identifies specific emotions in self and others from facial expression, posture, verbalizations. p. 230 | Identifies specific emotions in self and others. p. 310 | Identifies increasing number of emotions in self and others with some accuracy. $\text { p. } 371$ | Identifies increasing number of emotions in self and others with increasing accuracy. <br> p. 439 |
| Recognizes the existence of a wide range of emotions and feelings. p. 167 | ```Identifies emotions from a variety of stimuli (pictures, stories, pantomime). p. 230``` | Identifies emotions from a variety of stimuli in pictorial and written form (for partially sighted) and brailled materials (for blind) through both verbal and nonverbal cues. p. 310 | Recognizes mixed emotions or changing emotions. <br> p. 371 | Demonstrates increasing awareness of mixed and changing emotions, in self and others. p. 439 |
|  |  |  | ```Distinguishes degrees of emotion (pleasant, ecstatic). p. }37``` | Describes emotional state with accuracy. p. 439 |
| Demonstrates understanding that feelings can be expressed in appropriate or inappropriate ways. p. 167 | Recognizes that people can make one another happy or sad by things they say or do. <br> p. 230 | Identifies causes of emotions. $\text { p. } 310$ | Demonstrates increasing awareness of causes of emotions and consequences of emotional reactions. p. 371 | ```Predicts emotional reaction of self and others in a given situation. p. }43``` |
|  |  | Identifies consequences of emotional reactions. p. 310 | Recognizes the relationship between emotion and behavior. p. 371 | Recognizes that emotional states vary with the individual and circumstances. p. 439 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: |
| Indicates when he is feeling uncomfortable. p. 230 | Recognizes signs and causes of stress in self and others. p. 311 | Recognizes and categorizes the causes of stress in self and others, e.g. threat, conflict, frustration. p. 372 |  |
| Demonstrates ability to relax.$\text { p. } 230$ | Practises relaxation with guidance. p. 311 | Identifies and discusses appropriate ways of dealing with stress. p. 372 | Identifies and describes appropriate/inappropriate ways of dealing with stress. <br> p. 439 <br> Identifies and discusses ways in which some stress is beneficial rather than harmful, e.g. pressure to complete a task. p. 440 |
|  |  | Demonstrates ability to cope with stress. p. 372 | Demonstrates ability to cope with stress. p. 440 |
| Responds appropriately to feelings. p. 231 | Expresses emotions appropriately in a variety of situations. p. 311 | Expresses emotions appropriately with regard to situation, intensity, relationship. p. 372 <br> Controls various emotions in a variety of settings. p. 372 | ```Expresses and controls emotions in a variety of settings. p. 440``` |
| Begins to control emotional reaction to stressful situations (criticism and blame, friendly teasing). p. 231 | Demonstrates understanding of the difference between being assertive and being aggressive. p. 311 | Recognizes and avoids potentially provoking situations (in familiar surroundings). <br> p. 372 | Demonstrates increasing skill in recognizing and avoiding potentially provoking situations, including unfamiliar situations. p. 440 |
|  | Begins to use appropriate verbal or physical behavior instead of aggressive acts in response to provoking situations. p. 311 | Responds appropriately to provoking situations. $\text { p. } 372$ |  |

VI Living vocarional skills overview

| LEVEL 2 | LEVEL 3 | LEVEL 4 | Level 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| B. Social Relationships <br> 1. Needs and Motivations |  | Recognizes how a stressful situation could have been avoided, or handled more appropriately. p. 311 |  |  |
| 1. Needs and Motivations |  | Distinguishes between needs and wants. p. 312 | Identifies human needs which are physical and those which are emotional. p. 373 | Identifies personal needs which may exist in the future, or in unfamiliar situations. <br> p. 441 |
|  | Demonstrates understanding that food, shelter and clothing are basic needs. p. 232 | Identifies basic needs of safety, belonging and adequacy. p. 312 | Identifies basic needs of safety, belonging and adequacy. <br> p. 373 | Categorizes needs by immediacy and importance. <br> p. 441 |
|  | Identifies those who provide these basic needs for him. p. 232 | Identifies how basic needs can be provided for. p. 312 | Identifies how basic needs can be provided for. p. 373 | Identifies ways in which predicted needs can be met by himself or others. p. 441 |
|  |  | Recognizes the relationship between behavior and needs or motives. p. 312 | Recognizes the relationship between behavior and needs or motives. p. 373 | Identifies situations in which satisfaction of personal needs must be delayed or foregone because of the needs of others. p. 441 |
| Begins to identify situations in which people need to help each other. p. 169 | Identifies situations in which people need help or protection (il1, hurt, lost), in real or fantasy situations. p. 232 | Identifies an increasing number of situations in which people need help (alone, left out, failure, rejected). <br> p. 312 | Identifies an increasing number of situations in which people need help (alone, left out, failure, rejected). <br> p. 373 | Identifies when two personal needs may be in conflict and suggests appropriate resolution of the conflict. p. 441 |

VI LIVING VOCATIONAL SKILLS OVERVIEW
VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| a) Expressive Communication Skills |  |  |  |  |
| Communicates in a variety of ways. p. 169 | Communicates in a number of ways (gestures, speaking, writing, facial expressions for the visually impaired). p. 233 <br> Seeks attention appropriately. p. 233 | Communicates more effectively with others (appropriate assertion for needs, direct messages). p. 313 | Demonstrates increased skill <br> in communicating with others. <br> p. 374 | Demonstrates a continuing development of communication skills. p. 442 |
|  | Obtains information from others by asking appropriate questions. p. 233 <br> Responds to the questions of others, gives information when asked. p. 233 | Practises appropriate questioning techniques. p. 313 |  |  |
| Communicates with others in socially acceptable ways. <br> p. 170 | Communicates with others in socially acceptable ways (taking turns, getting attention before speaking, demonstrating courtesy). p. 234 | Communicates effectively with others in socially appropriate ways. p. 313 | Communicates effectively in small groups. p. 375 | Communicates effectively in public meetings. p. 442 |
|  | Demonstrates ability to introduce himself to an individual or a group. p. 234 | Participates in various forms of communication, e.g. group discussion. p. 313 <br> Recognizes and uses appropriate speech in social situations. p. 314 | Participates in more formal types of communication (debate, discussion, meetings, interviews). p. 375 <br> Recognizes and uses appropriate speech in social situations. p. 375 | Uses appropriate communication in various settings. <br> p. 442 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI LIVING vocational, SKills overview

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| c) Problem Solving and Decision Making |  |  |  |  |
| Makes simple choices, e.g. which toy to play with. p. 170 | Practises making personal decisions in the classroom. p. 235 | Identifies what information is needed to make decision. p. 314 | Demonstrates understanding of the terms: problems, decision, consequences, solution. p. 376 |  |
| Begins to participate in decision making process. <br> p. 170 | Participates in decision making process. p. 235 | Given steps in problem solving demonstrates understanding of the process. p. 314 | Demonstrates the steps of problem solving new and personal experiences with minimal supervision. <br> p. 376 | Applies steps in problem solving to new and personal experiences or situations. $\text { p. } 443$ |
| Begins to recognize consequences of his choice. <br> p. 170 | Recognizes possible consequences of decisions. <br> p. 235 | Recognizes that alternative choices may be made. p. 314 | Demonstrates knowledge that accurate and complete information aids in appropriate decision making. p. 376 <br> Collects information relevant to the decision being made. p. 376 |  |
|  |  |  | Demonstrates ability to evaluate most appropriate solution. p. 376 | Makes decisions in an appropriate manner, having obtained available information, weighed alternatives and evaluated possible consequences. p. 443 |
| Recognizes his needs and the needs of others in problem solving situations. p. 171 | Identifies a problem situation and suggests a possible solution. p. 235 | Identifies factors which cause problem. p. 315 | Demonstrates increased awareness of how problems are caused. <br> p. 376 | Develops an awareness of how potential problem situations can be avoided. <br> p. 443 |

vi living vocational skills overview

| Level 2 | Level 3 | Level 4 | Level 5 | Level 6 |
| :---: | :---: | :---: | :---: | :---: |
|  | Participates in appropriate conflict management strategies: taking turns, apologizing, soliciting, intervention, sharing. p. 235 | Identifies a conflict situation and applies conflict management strategies under direction of teacher. p. 315 | Demonstrates increasing <br> ability to apply constructive conflict management techniques with increasing independence. p. 376 | Uses conflict management strategies in new and personal experiences and situations. p. 443 |
| 4. Rules and Routines |  |  |  |  |
| Recognizes, discusses and predicts a routine sequence of wants at home and school. <br> p. 171 | States the behavior expected (sharing, consideration, respect, cooperation, good manners) when given a situation at home or school. p. 235 | Identifies school rules and recognizes transgressions of these. p. 315 | Identifies rules of behavior in a variety of familiar situations (field trips, parties, sports activities). p. 376 | Identifies probable rules in a number of unfamiliar situations, e.g. on the job, public facility. p. 444 |
| Recognizes necessity for rules in groups. p. 171 | Demonstrates appropriate adherence to simple rules in the classroom and on the playground. p. 236 | Follows rules of appropriate behavior in school and on the playground, without direct supervision. p. 315 | Follows rules of appropriate behavior in a variety of familiar situations. p. 377 | Follows rules of appropriate behavior in a variety of unfamiliar settings by modelling appropriate behavior of others. p. 444 |
| Demonstrates understanding that breaking rules has consequences. p. 171 | Identifies and accepts consequences of breaking class rules. p. 236 | Identifies consequences of breaking rules (in community). <br> p. 315 | Identifies the potential consequences of breaking rules in a variety of familiar situations. | Identifies the potential consequences of breaking rules in a variety of unfamiliar situations. p. 444 |
| Demonstrates understanding that people need rules to organize their lives. p. 171 | Identifies rules which cannot be changed and routines which can be modified. p. 236 | Identifies the need for routines and rules (order, protection, equality). p. 315 | Formulates routines/rules for familiar situations and identifies consequences.p. 377 | Formulates rules for unfamiliar situations and identifies consequences. p. 444 |
| Demonstrates understanding that group rules may be modified, depending on the situation. p. 171 | Demonstrates understanding that routines and rules made by the group may be modified, depending on the situation, e.g. rules for games. p. 236 | Identifies situations which require the establishment of routines or rules in school or on the playground. p. 315 | Identifies ways in which rules made by others may be modified, e.g. voting. $\text { p. } 377$ | Recognizes the need to abide by rules even when not agreeing with them. <br> p. 444 |
| Recognizes need to follow directions of adults when travelling. p. 171 | Recognizes need to follow directions of adults when travelling. p. 236 | Recognizes need to follow rules when travelling either p. 315 alone or with sighted guide. | Recognizes that special rules govern Orientation and Mobility for visually impaired students. p. 377 | Recognizes rules that relate specifically to visually impaired, e.g. guide dogs, white canes. p. 444 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | Level 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| 5. Social Roles |  |  |  |  |
| Identifies characteristics of family roles, e.g. mother, father, sister, brother. <br> p. 172 | Identifies roles associated with the family and lists some characteristics of these roles (mother, father, sister, grandmother). p. 236 | Identifies roles associated with the school and states some of the characteristics of these roles. p. 316 | Identifies roles associated with the community and states some of the characteristics of these roles. p. 377 | Identifies roles in unfamiliar situations and ascribes probable characteristics to these roles, e.g. boss/ employee. p. 444 |
| Recognizes leadership of adults. p. 172 | Identifies leaders within the classroom or playground. <br> p. 236 | Assumes leader roles in the classroom/playground with peers in structured situations (games, classroom activities). p. 316 | Recognizes the difference between official and unofficial roles, e.g. president vs. friend. p. 377 |  |
|  | Recognizes the authority and responsibilities associated with some adult roles. <br> p. 236 | Begins to recognize that roles may involve rights and privileges, duties and obligations. p. 316 | Recognizes the privileges and obligations associated with a variety of roles, e.g. student/teacher, child/parent. p. 377 | Recognizes that conflict may arise when people behave in ways not consistent with role expectations, e.g. police officers who break the law. p. 444 |
| Identifies own multiple role in family, e.g. son, grandson, brother. p. 172 | Identifies multiple role of familiar adults, e.g. father is also employee. p. 237 | Recognizes that adults have multiple roles (teacher, friend, student, nurse). p. 316 | Recognizes that a given person may assume several roles at the same time, e.g. cub leader, student, child. <br> p. 378 | Recognizes that a person must assume different roles at different times in his life, e.g. child, parent, student, employee. p. 445 |
| 6. Values and Social Expectations |  |  |  |  |
| Demonstrates appropriate behavior at home and school. <br> p. 172 | Demonstrates understanding that appropriate behaviors vary according to situations. p. 237 | Demonstrates appropriate behavior in home, school and community. p. 316 | Behaves appropriately in all social situations. p. 378 |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates initial understanding that people have varying values, customs, and social expectations. <br> p. 172 | Identifies differences in cultures, e.g. costume, food, language. p. 237 | Demonstrates awareness of differences in cultures existing in community and province (including Indians, other ethnic groups, special events, etc.). p. 316 | Demonstrates understanding of the relationship between social customs and values. p. 378 | Recognizes that values and social customs vary with the culture and that a custom or value appropriate in one setting may not be so in another, e.g. Hutterites. <br> p. 445 |
| Repeats simple do's and don't's of behavior. p. 172 | Recognizes basic values, e.g. honesty, kindness. p. 237 | Recognizes basic societal values: honesty, kindness, helpfulness, cooperation, courtesy. p. 316 <br> Identifies the behavior which best illustrates a given value. p. 317 | Determines a person's values from his goals, interests, attitudes, feelings, activities, etc. p. 378 <br> Demonstrates increasing awareness of personal values by stating what they would do in a given situation and why. p. 378 <br> Recognizes some alternative behaviors which others might engage in the same situation, e.g. have a date but no money. p. 378 | Relates personal values to those of society. p. 445 <br> Demonstrates understanding of how group opinion affects personal value system. p. 445 <br> Recognizes when personal and social values come in conflict, and attempts to resolve the conflict. p. 445 |
| Recognizes some basic societal <br> rules. p. 172 | ```Recognizes need for social rules. p. 237``` | Recognizes violation of basic societal values. p. 317 | Demonstrates understanding of the relationship between moral values and laws, e.g. justice, freedom, equality, responsibility. p. 378 | Demonstrates understanding of the concepts of human rights, e.g. dignity and equality. p. 445 |
|  | States simple rules and recognizes when they are broken (golden rule, school or class rules, rules for games). p. 237 | Recognizes that most rules are for the protection of individuals. p. 317 | Demonstrates understanding of need for protection of self and property. | Demonstrates understanding of legal and moral responsibility for self and others. p. 445 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| ORIENTATION AND MOBILITY <br> A. The Body Image |  | Indicates what might happen if given rules were broken. <br> p. 317 | Demonstrates understanding of simple legal consequences. <br> p. 378 | Demonstrates understanding of basics of penal code. <br> p. 445 |
| Names and identifies body parts. p. 175 <br> Identifies clothing and body parts. p. 175 | Names and identifies body parts. p. 240 <br> Identifies clothing and body parts. p. 240 | Note: At this level the student should be involved in formal Orientation and Mobility training with a qualified instructor. |  |  |
| Identifies clothing and accessories for body parts. p. 175 | Identifies clothing and accessories for body parts. $\text { p. } 240$ |  |  |  |
| Identifies another person's, a model's or an animal's body parts. p. 175 | Identifies another person's, a model's or an animal's body parts. p. 240 |  |  |  |
| Demonstrates ability to move body parts. <br> p. 175 | Demonstrates ability to move body parts. p. 240 |  |  |  |
| Demonstrates ability to move his own body parts to other body parts. <br> p. 175 | Demonstrates ability to move his own body parts to other body parts. p. 240 |  |  |  |
| Demonstrates ability to move his own body parts to touch another person's body parts. p. 175 | Demonstrates ability to move his own body parts to touch another person's body parts. p. 240 |  |  |  |
| Demonstrates ability to move body and specific body parts to objects. p. 176 | Demonstrates ability to move body and specific body parts to objects. p. 240 |  |  |  |
| Demonstrates ability to move objects to specific body parts. <br> p. 176 | Demonstrates ability to move objects to specific body parts. $\text { p. } 241$ |  |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Names and identifies front and back of the body. p. 176 | Names and identifies front and back of the body. p. 241 |  |  |  |
| Identifies objects and/or sounds in front and in back of the body. p. 176 | Identifies objects and/or sounds in front and in back of the body. p. 241 |  |  |  |
| Demonstrates ability to place objects in front and in back of the body. p. 176 | Demonstrates ability to place objects in front and in back of the body. p. 241 |  |  |  |
| Demonstrates ability to move his body forward and backward. p. 176 | Demonstrates ability to move his body forward and backward. p. 241 |  |  |  |
| Names and identifies right and left sides of the body. p. 176 | Names and identifies right and left sides of the body. p. 241 |  |  |  |
| Identifies objects and/or sounds to the right and to the left of the body. p. 176 | Identifies objects and/or sounds to the right and to the left of the body. p. 241 |  |  |  |
| Demonstrates ability to place objects to the right and to the left of the body. p. 176 | Demonstrates ability to place objects to the right and to the left of the body. p. 241 |  |  |  |
| Demonstrates ability to move his body to the right and to the left. p. 176 | Demonstrates ability to move his body to the right and to the left. p. 241 |  |  |  |
| Identifies right and left sides of another person's body. p. 177 | Identifies right and left sides of another person's body. p. 241 |  |  |  |
| Demonstrates ability to move his own body using basic concept words. p. 177 | Demonstrates ability to move his own body using basic concept words. p. 241 |  |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates ability to move his own body to another person's body using basic concept words. p. 177 | Demonstrates ability to move his own body to another person's body using basic concept words. <br> p. 242 |  | . |  |
| Demonstrates ability to move body to objects using basic concept words. p. 177 | Demonstrates ability to move body to objects using basic concept words. <br> p. 242 |  |  |  |
| Demonstrates ability to move objects using basic concept words. p. 177 | Demonstrates ability to move objects using basic concept words. p. 242 |  |  |  |
| B. Basic Concepts |  |  |  |  |
| Demonstrates knowledge of the basic concept of size. p. 179 | Demonstrates knowledge of the basic concept of size. p. 244 |  |  |  |
| Demonstrates knowledge of the basic concept of shape. p. 179 | Demonstrates knowledge of the basic concept of shape. p. 244 |  |  |  |
| Demonstrates knowledge of the basic concept of texture. <br> p. 179 | Demonstrates knowledge of the basic concept of texture. <br> p. 244 |  |  |  |
| Demonstrates knowledge of the basic concept of color. p. 179 | Demonstrates knowledge of the basic concept of color. p. 244 |  |  |  |
| Demonstrates knowledge of the basic concept of weight. <br> p. 179 | Demonstrates knowledge of the basic concept of weight. <br> p. 244 |  |  |  |
| Demonstrates knowledge of the basic concept of location of specific items. <br> p. 179 | Demonstrates knowledge of the basic concept of location of specific items. $\text { p. } 244$ |  |  |  |
| Demonstrates knowledge of the uses of specific items. p. 179 | Demonstrates knowledge of the uses of specific items. p. 244 |  |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 |
| :---: | :---: | :---: | :---: |
| Demonstrates knowledge of the basic concept of position. <br> p. 179 | Demonstrates knowledge of the basic concept of position. <br> p. 244 |  |  |
| Demonstrates knowledge of the basic concept of movement. <br> p. 179 | Demonstrates knowledge of the basic concept of movement. $\text { p. } 244$ |  |  |
| Demonstrates knowledge of the basic concept of sound. p. 179 | Demonstrates knowledge of the basic concept of sound. p. 244 |  |  |
| Demonstrates knowledge of the basic concept of taste. p. 179 | Demonstrates knowledge of the basic concept of taste. p. 244 |  |  |
| Demonstrates knowledge of the basic concept of odor. p. 179 | Demonstrates knowledge of the basic concept of odor. p. 244 |  |  |
| Demonstrates ability to lie down. p. 181 | Demonstrates ability to lie down. p. 246 |  |  |
| Demonstrates ability to roll. <br> p. 181 | Demonstrates ability to roll. <br> p. 246 |  |  |
| Demonstrates ability to scoot. <br> p. 181 | Demonstrates ability to scoot. <br> p. 246 |  |  |
| Demonstrates ability to sit. <br> p. 181 | Demonstrates ability to sit. p. 246 |  |  |
| Demonstrates ability to knell. <br> p. 181 | Demonstrates ability to kneel. $\text { p. } 246$ |  |  |
| Demonstrates ability to crawl. <br> p. 181 | Demonstrates ability to crawl. P. 246 |  |  |
| Demonstrates ability to stand. $\text { p. } 181$ | Demonstrates ability to stand. p. 246 |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates ability to walk. p. 181 | Demonstrates ability to walk. <br> p. 246 |  |  |  |
| Demonstrates ability to march. p. 181 | Demonstrates ability to march. p. 246 |  | , |  |
| Demonstrates ability to jump. $\text { p. } 181$ | Demonstrates ability to jump. <br> p. 246 |  |  |  |
| Demonstrates ability to hop. $\text { p. } 181$ | Demonstrates ability to hop. <br> p. 246 |  |  |  |
| Demonstrates ability to run. $\text { p. } 181$ | Demonstrates ability to run. P. 246 |  |  |  |
| Demonstrates ability to sidestep. p. 181 | Demonstrates ability to sidestep. p. 246 |  |  |  |
| Demonstrates ability to gallop. p. 182 | Demonstrates ability to gallop. p. 246 |  |  |  |
| Demonstrates ability to skip. p. 182 | Demonstrates ability to skip. p. 246 |  |  |  |
| Demonstrates ability to stretch. p. 182 | Demonstrates ability to stretch. p. 247 |  |  |  |
| Demonstrates ability to push and pull. p. 182 | Demonstrates ability to push and pull. p. 247 |  |  |  |
| Demonstrates ability to twist. p. 182 | Demonstrates ability to twist. p. 247 |  |  |  |
| Demonstrates ability to bend. p. 182 | Demonstrates ability to bend. $\text { p. } 247$ |  |  |  |
| Demonstrates ability to stoop and squat. p. 182 | Demonstrates ability to stoop and squat. p. 247 |  |  |  |
| Demonstrates ability to climb. p. 182 | Demonstrates ability to climb. $\text { p. } 247$ |  |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

vi living vocational skills overview

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates ability to use sensory devices. p. 184 | Demonstrates ability to use sensory devices. p. 250 |  |  |  |
| Demonstrates understanding of mobility concepts. p. 184 | Demonstrates understanding mobility concepts. p. 250 |  |  |  |
| 3. Tactual Modality | 3. Tactual Modality |  |  |  |
| Identifies a surface or an object through the tactual sense whether using hands and/or feet. p. 185 | Identifies a surface or an object through the tactual sense whether using hands and/or feet. p. 250 |  |  |  |
| Demonstrates ability to make distinctions between various objects. p. 185 | Demonstrates ability to make distinctions between various objects. p. 250 |  |  |  |
| Demonstrates ability to confirm the object tactually. p. 185 | Demonstrates ability to confirm the object tactually. $\text { p. } 250$ |  |  |  |
| Demonstrates ability to obtain knowledge through his senses. <br> p. 185 | Demonstrates ability to obtain knowledge through his senses. p. 250 |  |  |  |
| 4. Olfactory Modality | 4. Olfactory Modality |  |  |  |
| Demonstrates ability to identify various odors. p. 185 | Demonstrates ability to identify various odors. p. 250 |  |  |  |
| Demonstrates ability to make distinctions between various odors. p. 185 | Demonstrates ability to make distinctions between various odors. p. 250 |  |  |  |
| Demonstrates ability to confirm a particular odor. <br> p. 185 | Demonstrates ability to confirm a particular odor. $\text { p. } 250$ |  |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates understanding that one food is available in many forms. p. 187 | Demonstrates ability to select a balanced meal. p. 252 | Demonstrates knowledge of a balanced diet. p. 318 | Demonstrates understanding of the importance of a proper diet. p. 379 |  |
| Demonstrates knowledge that people eat some foods because they are good for them. <br> p. 188 | Demonstrates knowledge of the rules of good eating. p. 252 | Demonstrates knowledge of the relationship between good eating habits, growth and development. p. 318 | Demonstrates understanding of the role of nutrients for growth, health and energy. $\text { p. } 379$ |  |
| Demonstrates understanding that some foods should be eaten rarely because they have no nutritional value. <br> p. 188 | Demonstrates understanding of "junk-food" to be avoided between meals. p. 252 | Demonstrates understanding of the lack of nutritional value in "junk-food". p. 318 | Demonstrates understanding of the relationships between nutrition, fatigue, illness and growth. p. 379 <br> Demonstrates awareness that eating places must meet health standards. p. 379 | Demonstrates awareness of the relationships between nutrition, fatigue, illness and growth. p. 446 <br> Recognizes the protection provided by the health department in checking food distribution establishments. p. 446 |
| B. Personal Care |  |  |  |  |
| 1. Knowledge of Body |  |  |  |  |
| Identifies basic body parts on self and others. p. 189 | Identifies basic body parts. p. 253 | Identifies functions of body parts. p. 319 | Names major body organs. p. 380 | States functions of major body organs. p. 447 |
| Recognizes and discusses differences between boys and girls. p. 189 | Recognizes and explains differences between boys and girls. p. 253 | Recognizes secondary physical and sexual changes. p. 319 | Recognizes adolescent growth processes. p. 380 | Recognizes and copes with adolescent growth processes. p. 447 |
|  |  |  |  | States basic facts related to birth control. p. 447 |
| 2. Care of Body |  |  |  |  |
| Assumes initial responsibility for body hygiene, e.g. washes face, brushes teeth, toileting. p. 189 | Demonstrates some independence in matters of personal hygiene. p. 253 | Demonstrates independence in principles of body cleanliness. p. 319 | Demonstrates principles of good grooming in daily life. p. 380 | Practises good grooming and cleanliness. p. 447 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI LIVING VOCATIONAL SKills OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| C. Community Health Services |  |  |  |  |
| Demonstrates knowledge of the existence and function of community health workers. <br> p. 190 | Identifies health helpers and their function. p. 255 | Identifies medical personnel and their functions. p. 321 | Demonstrates knowledge of health and emergency resources. <br> p. 382 | Recognizes the contribution of the helping professions in improving community health, e.g. medicine, dentistry, psychology, social work. p. 449 |
| Demonstrates knowledge that these community helpers are there to help us. p. 190 | Demonstrates knowledge that workers are there to help us. p. 255 | Identifies hygiene personnel and their function. p. 321 | Identifies community health agencies. p. 382 | Uses community health and mental health agencies appropriately. p. 449 |
|  |  | Identifies mental health personnel and their function. p. 321 | Identifies community mental health agencies. p. 382 |  |
| Demonstrates understanding of places to go to for medical help. <br> p. 190 | Demonstrates understanding of places to go to for medical help. p. 255 | Demonstrates ability to use emergency phone numbers. p. 321 | Demonstrates ability to use health and emergency resources. <br> p. 382 | Demonstrates ability to locate and utilize community health services. p. 449 |
|  | Recognizes the importance of having a family doctor or dentist. p. 255 | Recognizes the importance of having a family doctor and dentist. p. 321 | Identifies location of family doctor and dentist. p. 382 | Travels to doctor and dentist independently after making appointment. <br> p. 449 |
| SAFETY |  |  |  |  |
| A. In the Home |  |  |  |  |
| Demonstrates awareness of common sources of danger within the home. p. 191 | Demonstrates awareness of common accidents which might occur within the home. p. 296 | Demonstrates increased awareness of common accidents which could occur in the home. p. 322 | Demonstrates awareness of the causes and types of common accidents which could occur in the home. p. 383 | Demonstrates independence and reliability in coping with dangers and accidents. <br> p. 450 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| With assistance, identifies dangers associated with various areas and items in the home, e.g.: <br> - sharp objects <br> - electrical outlets <br> - appliances <br> - tools, machinery <br> - animals <br> - poison, etc. p. 191 | With assistance, demonstrates safe use of kitchen tools, appliances, etc. p. 256 | Demonstrates safe use of kitchen tools, appliances, etc. p. 322 |  |  |
| Demonstrates understanding of danger of fire in the home. $\text { p. } 191$ <br> In the School | Follows adult instruction about fire drill in home. $\text { P. } 256$ | Follows appropriate procedures for fire drill in the home. <br> p. 322 | Demonstrates knowledge of fire prevention and fire safety. p. 383 | Demonstrates how to utilize community emergency services. p. 450 |
| Demonstrates awareness of common sources of danger within the school setting. p. 192 | Demonstrates awareness of dangerous situations which might occur within the school. <br> p. 257 | Demonstrates increased awareness of dangerous situations which could occur in the school. p. 323 | Demonstrates knowledge of common accidents which could occur in the school. p. 384 |  |
| In the Community |  | ```Demonstrates awareness of safety precautions taken during physical activities. p. }32``` | Follows safety procedures during physical activities. p. 384 |  |
| Demonstrates awareness of common sources of danger within the community. p. 193 | Demonstrates understanding of different types and magnitudes of disasters. p. 258 | Demonstrates understanding of role of police and firemen in case of disaster. $\text { p. } 324$ | Demonstrates understanding of how to cooperate with authorities in case of disaster. p. 385 | Demonstrates knowledge of sources of help in case of community disaster. <br> p. 450 |
| Fire |  |  |  |  |
| Demonstrates understanding of what fire is, and what it can do to help or harm us. p. 194 | Demonstrates awareness of the most common forms and causes of fire. p. 259 | Demonstrates increased awareness of the most common forms and causes of fire. p. 325 |  |  |

vi living vocational skills overview

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates knowledge of fire prevention. p. 194 | Identifies the proper use and misuse of fire. p. 259 <br> Demonstrates knowledge of fire prevention and fire safety. p. 259 | Demonstrates appropriate use of matches, etc. p. 325 <br> Demonstrates knowledge of and practises fire prevention and fire safety. p. 325 | Demonstrates knowledge of and practises fire prevention and fire safety. p. 386 |  |
| Practises good fire prevention habits. p. 194 | Practises good fire prevention habits. p. 259 |  |  |  |
| Demonstrates understanding of the meaning of fire alarms and drills. p. 194 | Responds to fire alarms appropriately. <br> p. 259 | Demonstrates ability to seek assistance from the public in case of a fire in a public building. p. 325 | Demonstrates ability to seek assistance from the public in case of a fire in a public building. p. 386 | Demonstrates ability to seek assistance from the public in case of a fire in a public guilding. p. 451 |
| Responds to fire alarms appropriately. <br> Traffic <br> p. 194 |  |  |  |  |
| Demonstrates understanding of what streets and sidewalks are. p. 195 | Note: Additional skills in th | area will be taught by Orien | ion and Mobility instructors |  |
| Uses streets and sidewalks appropriately. p. 195 |  |  |  |  |
| Demonstrates understanding of the dangers of using streets and sidewalks. p. 195 |  |  |  |  |
| Demonstrates ability to travel streets and sidewalks in safety by using own senses and utilizing responsible sighted guide as appropriate. p. 195 | Demonstrates awareness of the role of the safety patrol. $\text { p. } 259$ | Demonstrates awareness of the role of the safety patrol. <br> p. 326 |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

Vi Living vocational skills overview

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| With supervision, constructs simple projects. p. 196 | Constructs simple project independently. p. 262 | With supervision, constructs more complex projects. <br> p. 327 | Demonstrates ability to construct more complex projects. p. 388 | Demonstrates ability to construct complex projects. <br> p. 453 |
| Demonstrates safe use of simple tools. p. 196 | Demonstrates ability to follow safety procedures when using tools. p. 262 | Demonstrates ability to follow safety procedures when using tools. p. 327 | Demonstrates ability to follow safety procedures when using tools and equipment. p. 388 | Demonstrates ability to follow safety procedures when using tools and equipment. p. 453 |
| 2. Following Directions <br> Follows simple directions. <br> p. 196 | Follows a more complex set of directions. p. 262 | Demonstrates ability to follow more complex set of directions. <br> p. 327 | Demonstrates ability to follow complex set of directions. p. 389 | Demonstrates ability to follow all types of directions independently and accurately. p. 453 |
| Responds to persons in authority. <br> p. 196 | Identifies persons in authority in the school and immediate community. p. 262 | Identifies person in authority in specific work situations. p. 328 | Identifies person in authority in a variety of work situations. <br> p. 389 | Demonstrates awareness of whom to consult should problems arise. p. 454 |
| 3. Decision Making |  | Demonstrates acceptance of supervision in specific work situations. p. 328 | Demonstrates ability to accept supervision in specific work situations. <br> p. 389 | ```Demonstrates ability to accept supervision in specific work situations. p. }45``` |
| Chooses between two or more alternatives. p. 196 | Chooses independently between two or more alternative activities. p. 263 | Demonstrates ability to make appropriate decisions in work situations. p. 328 | Demonstrates ability to make appropriate decisions in work situations. p. 389 | Demonstrates ability to make appropriate decisions in work situations. p. 454 |
| 4. Independence |  |  |  |  |
| Demonstrates ability to behave appropriately in familiar situations, e.g. school, playground. p. 197 | Demonstrates ability to behave appropriately in unfamiliar situations. p. 263 | Demonstrates ability to perform satisfactorily in unfamiliar work situations. <br> p. 328 | ```Demonstrates ability to per- form satisfactorily in familiar work situations. p. }38``` | Demonstrates ability to perform satisfactorily in familiar and unfamiliar work situations. p. 454 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| B. Career Planning and Exploration |  |  |  |  |
| 1. Why Work |  |  |  |  |
| Recognizes that most people work. <br> p. 198 | Recognizes that people need money. p. 264 | Recognizes that people are paid for jobs. p. 329 | Demonstrates recognition that people are paid according to work done. p. 390 | Demonstrates some financial independence through working. p. 455 |
| Demonstrates understanding that work brings income to parents. p. 198 | Recognizes that parents have different work and incomes. <br> p. 264 | Recognizes that people need money to purchase necessities. $\text { p. } 329$ | Demonstrates awareness that working for a salary brings independence. p. 390 |  |
| Demonstrates understanding that doing work well brings satisfaction. p. 198 | Demonstrates understanding that finishing tasks earns praise. p. 264 | ```Recognizes that finishing something makes one feel good (self-worth). p. }32``` | Demonstrates awareness that satisfaction results from task/job completion. p. 390 |  |
| 2. Job Awareness |  |  |  |  |
| Demonstrates understanding of work done by some community workers. p. 198 <br> 3. Job Demands | Demonstrates awareness that people do different jobs: in home, in school, in community. p. 264 | Demonstrates awareness that people do different jobs: in home, in school, in community. p. 329 | ```Develops knowledge of variety of jobs/careers. p. }39``` | ```Develops knowledge of variety of jobs and careers available. p. }45``` |
|  |  |  | Demonstrates understanding that jobs require different skills. p. 391 | ```Demonstrates knowledge of requirements for practical jobs/careers. p.455``` |
|  |  |  | Explores careers through practical experience. p. 391 | Explores careers through practical experience. <br> p. 455 |
|  | Demonstrates good work habits. $\text { p. } 264$ | Demonstrates good work habits. <br> P. 329 | Demonstrates good work habits p. 391 | Demonstrates good work habits. P. 455 |
|  | Demonstrates positive attitude towards work. p. 264 | Demonstrates punctuality. $\text { p. } 329$ | Demonstrates positive attitude towards work. p. 391 | Demonstrates positive attitude towards work. p. 455 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Follows simple instructions. <br> p. 198 <br> Completes tasks as assigned. <br> p. 198 | Demonstrates ability to follow instructions. p. 264 <br> Completes selected tasks at school and home and begins to assume some responsibility for this. p. 264 <br> Recognizes some of own mistakes and corrects them. <br> p. 265 | Demonstrates ability to follow instructions. p. 330 <br> Completes selected tasks at school and home and assumes some responsibility for this. p. 330 <br> Recognizes own mistakes and corrects them. p. 330 | Completes all tasks assigned in all areas at school and on the job. p. 391 | $\begin{aligned} & \text { Assumes complete } \\ & \text { responsibility for task. } \\ & \text { p. } 455 \end{aligned}$ |
| Listens attentively. p. 198 | Demonstrates good listening habits. p. 265 | Demonstrates good listening habits. p. 330 <br> Communicates effectively with peers. p. 330 | Demonstrates good listening habits. p. 391 <br> Demonstrates ability to communicate effectively with people at school and on the job. p. 392 | Demonstrates ability to relate to personnel at school and on the job. p. 455 |
|  |  | Assumes some responsibility for maintaining own belongings. p. 330 | Maintains personal and other belongings in neat fashion in school and at work. <br> p. 392 | Maintains personal and other belongings in neat fashion in school and at work. <br> p. 456 |
|  |  | Follows school routines. <br> p. 330 | Develops awareness of job routines. p. 392 <br> Travels to work stations independently. p. 392 <br> Demonstrates awareness of time as it relates to job. p. 392 | Demonstrates punctuality. <br> P. 456 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI LIVING vocational skills overview

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| HOME MANAGEMENT |  |  |  |  |
| A. Clothing |  |  |  |  |
| 1. Care |  |  |  |  |
| Recognizes own clothing. $\text { p. } 200$ | Recognizes own clothing. $\text { p. } 268$ | Identifies and labels own clothing. p. 334 |  |  |
| Demonstrates awareness that each person has his own clothing. p. 200 |  |  |  |  |
| Undresses with minimal supervision or help. p. 200 | Undresses/dresses with minimal supervision or help. <br> p. 268 | Undresses/dresses independently. <br> p. 334 |  |  |
| Demonstrates ability to seek help if needed when dressing. <br> p. 200 | Seeks help if something is lost. p. 269 | Demonstrates appropriate strategies for locating lost items, both dropped and misplaced. p. 334 |  |  |
| Dresses self with decreasing amount of assistance. p. 200 |  |  |  |  |
| Fastens clothing, using snaps, buttons, zippers, buckels and laces. p. 200 |  |  |  |  |
| Accepts some responsibility for care of clothing. $\text { p. } 200$ | Accepts increasing responsibility for care of clothing. p. 269 |  |  |  |
| Uses hangers and storage areas. p. 200 | Demonstrates ability to locate and use hangers and clothing storage areas appropriately. p. 269 | Organizes closet and drawer space appropriately. p. 334 | Organizes closet and drawer space appropriately. p. 398 | Organizes closet and drawer space appropriately. p. 462 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

vi living vocational skills overview

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| B. Food <br> 1. Shopping |  |  |  |  |
| Demonstrates awareness that food can be purchased in stores. <br> p. 202 | Describes what a food store is. p. 271 | Prepares a shopping list. p. 336 | Demonstrates ability to budget, including sales and seasonal items. p. 401 | Demonstrates ability to prepare shopping 1 ist and compares prices. p. 464 |
| Demonstrates awareness that items taken from a store must be paid for. <br> p. 202 | Lists and categorizes food and other articles which can be bought in a food store. p. 271 | Makes simple purchases. $\text { p. } 336$ |  |  |
| Demonstrates awareness that like products are shelved together in a store. p. 202 | ```Assists in selecting articles on food shopping list. p. }27``` | Identifies kinds and types of vegetables, fruits and meats. <br> p. 336 | Distinguishes between size and kinds of packaging. <br> p. 401 |  |
|  |  | ```With assistance, compares items for price and quality. p. }33``` | Compares items for price and quality. p. 401 |  |
|  |  | Distinguishes between quantity of various items. p. 336 | Demonstrates knowledge of weights and measures used in food stores. <br> p. 401 | Demonstrates knowledge of weights and measures used in food stores. <br> p. 464 |
|  |  | Explains and demonstrates how to get to a neighborhood grocery store. p. 336 | Demonstrates ability to usc stores and super-markets. <br> p. 401 |  |
|  |  |  | Distinguishes between convenience stores and supermarkets. <br> p. 401 |  |
|  |  |  | Differentiates between wholesale and retail. p. 401 |  |
|  |  | Demonstrates knowledge of brands advertised on television. p. 336 | Explains purpose and use of advertising. <br> p. 401 | Explains use and purpose of advertising. <br> p. 464 |
|  |  |  |  | Recognizes that false advertising occurs. p. 464 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| 2. Eating |  |  |  |  |
| Eats in a wide variety of food in various states. p. 202 |  |  |  |  |
| Names and describes a wide variety of foods. p. 202 |  |  |  |  |
| Names utensils correctly. <br> p. 202 | Identifies utensils. p. 271 | Identifies utensils and demonstrates comfortable and efficient use. p. 336 |  |  |
| With assistance, uses eating utensils. p. 202 | Demonstrates ability to use and clean utensils. p. 271 | Assists in the cleaning of kitchen area. p. 337 | Demonstrates ability to clean kitchen area and utensils. p. 402 |  |
| Demonstrates ability to <br> locate food on plate. p. 203 | Demonstrates ability to <br> locate food on plate. p. 272 |  |  |  |
| Demonstrates courtesy to others while eating. p. 203 | Demonstrates knowledge of appropriate manners and etiquette. <br> p. 272 | Practises appropriate manners and etiquette. p. 337 |  |  |
| Demonstrates awareness of appropriate ways to eat various foods. p. 203 | Demonstrates appropriate eating skills. p. 272 | Demonstrates appropriate eating skills. p. 337 |  |  |
| ```Demonstrates ability to describe food changes through freezing, cooking, canning. p. }20``` |  |  |  |  |
| 3. Preparation |  |  |  |  |
| Demonstrates some understanding of measuring, counting, etc. p. 203 | Demonstrates understanding of measuring, counting, etc. <br> p. 272 |  |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI Living vocational skills overview

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| 5. Preserving |  |  |  |  |
| Demonstrates understanding that refrigeration and freezers are used to preserve food. p. 204 | Describes function of a refrigerator and freezer. p. 273 | Describes function of a refrigerator and freezer. p. 338 |  |  |
| Demonstrates understanding that food must be handled with care and cleanliness. p. 204 | Handles food with care and cleanliness. <br> p. 273 | Handles food with care and cleanliness. p. 338 |  |  |
| Demonstrates understanding of appropriate storage of food, e.g. cans in cupboard, fresh produce in refrigerator, frozen food in the freezer. <br> p. 204 | Demonstrates understanding of the concept of perishables. $\text { p. } 273$ <br> Stores food correctly (cupboard, refrigerator). p. 273 | Demonstrates understanding of concept of perishables. $\text { p. } 338$ <br> Stores food correctly. p. 338 | Demonstrates knowledge of how to package for short and long term storage, including advantages and disadvantages. p. 403 | Describes short and long term storage methods. p. 465 |
| 6. Production |  |  |  |  |
| Demonstrates knowledge that foods come from various sources. p. 204 <br> Demonstrates awareness of the growth of plants and animals. <br> p. 204 | Identifies food sources. p. 273 | $\begin{aligned} & \text { Identifies food sources. } \\ & \text { p. } 338 \end{aligned}$ | Explains or describes production, processing and distribution of: <br> - garden products <br> - dairy products <br> - grain products <br> - fishing products. p. 403 | Explains or describes in detail production, processing and distribution of: <br> - garden products <br> - dairy products <br> - grain products <br> - fishing products. p. 465 |
| C. Maintaining the Home <br> 1. Selection |  |  |  |  |
| Recognizes sililarities and differences between his home and the homes of others. <br> p. 205 | Recognizes different types of homes. p. 274 | Explains what is available in housing. p. 339 | Chooses specific home design and explains choice on basis of construction, location, design and budget. p. 404 | Chooses specific home design and explains choice on basis of construction, location, design and budget. p. 466 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates ability to perform simple household tasks with close supervision. <br> p. 205 | Demonstrates ability to perform simple household tasks with minimal supervision. <br> p. 274 | Performs some household tasks. p. 339 | Performs househols tasks using appropriate equipment. $\text { p. } 404$ | Demonstrates efficient methods of performing daily household tasks. p. 467 |
|  |  | Identifies daily and weekly cleaning routines. p. 339 | Identifies household repairs necessary for safety. p. 405 | Demonstrates knowledge of cost of household repairs and need to get estimates. p. 467 |
|  |  | Demonstrates ability to use some tools, e.g. screwdriver. p. 339 | Demonstrates knowledge of and ability to use basic tools, e.g. hammer, screwdriver, drill, saw. p. 405 | Demonstrates increasing skill in using tools. p. 467 |
|  |  | Makes simple repairs. p. 339 | Demonstrates ability to do basic repairs and mainten~ ance. p. 405 <br> Recognizes when repairman is necessary. <br> p. 405 |  |
| Assists in care of pets and plants. p. 205 | Demonstrates ability to care for pets or plants. p. 275 |  |  |  |
|  | Recognizes that young children need care. p. 276 | Explains babysitting responsibilities. p. 340 | Begins babysitting for short periods. p. 406 | Babysits, assuming complete responsibility. p. 468 |
|  | Demonstrates ability to help with care of younger brothers and sisters. p. 276 | Demonstrates ability to help care for young children. <br> p. 340 | Demonstrates ability to dress, change, feed infant or child. <br> p. 406 | Demonstrates ability to dress, change, feed infant or child. p. 468 |

VI LIVING VOCATIONAL SKills OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Demonstrates ability to make decisions about bedtime and snacks for children. p. 406 <br> Demonstrates knowledge of what to do in an emergency. <br> p. 406 <br> Demonstrates ability to show love, warmth and respect for children and infants. p. 406 | Demonstrates ability to make decisions about bedtime and snacks for children. p. 468 <br> Identifies what to do in an emergency, e.g. injury, fire, theft. P. 468 <br> Demonstrates ability to show love, warmth and respect for children and infants. p. 468 <br> Demonstrates knowledge of the development (physical and emotional) of the young child. p. 468 <br> Recognizes emotional and physical needs of children. P. 468 |
| MONEY MANAGEMENT <br> A. Earning Money <br> Identifies money by touch. <br> p. 206 |  |  |  |  |
| Discriminates between coins and bills. p. 206 <br> Demonstrates understanding that coins and bills are both money. p. 206 |  |  |  |  |
| Begins to identify various coins by touch. p. 206 | Identifies coins and paper money. p. 277 <br> Uses money vocabulary. p. 277 | Identifies and arranges paper money and coins. p. 341 <br> Counts money, using coins and bills. p. 341 | Identifies and arranges paper money and coins. p. 407 <br> Counts money, using coins and bills. p. 407 |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
|  | Writes or brailles money amounts ( $1 c, 25$ c, $\$ 1.00$ ). p. 277 <br> With assistance, recognizes coins and bills in combination. p. 277 <br> Lists sources of money (parents, job, hobby). p. 278 | Brailles/writes money amounts of increasing complexity. <br> p. 341 <br> Transmits money amounts to calculator. p. 341 <br> Recognizes coins and bills in combination. p. 341 <br> Identifies jobs for which payment is made/is not made. <br> p. 342 | Brailles/writes money amounts of increasing complexity. <br> p. 407 <br> Transmits money amounts to calculator. p. 407 <br> Recognizes that different amounts of money are paid for different jobs. p. 407 | Demonstrates knowledge of sources of income other than wages, e.g. family allowance, welfare payments, unemployment insurance, assured income. p. 469 |
| ```Demonstrates understanding that sometimes money is earned for completion of a job. p. 206``` | Demonstrates knowledge that job must be completed to earn money. <br> p. 278 | Recognizes that jobs must be completed to earn money. <br> p. 342 | Identifies factors that affect wages, e.g. training, time, danger, seasonal. <br> p. 408 <br> Calculates money earned: <br> - gross/net pay <br> - regular/overtime <br> - hourly, weekly, monthly <br> - double time, time and a half <br> - holiday pay. p. 408 <br> Reads and interprets cheque stubs. p. 408 | Identifies factors that affect wages, e.g. training, time, danger, seasonal. <br> p. 469 <br> Calculates money earned: <br> - gross/net pay <br> - regular/overtime <br> - hourly, weekly, monthly <br> - double time, time and a half <br> - holiday pay. p. 469 <br> Reads, interprets and demonstrates understanding of terms and figures on cheque stubs, e.g. union dues, unemployment insurance, C.P.P. p. 469 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| B. Spending Money |  | Demonstrates understanding that the value of money changes over time, e.g. inflation. p. 342 | Demonstrates understanding that the value of money changes over time, e.g. inflation. p. 408 | Demonstrates understanding that the value of money changes over time, e.g. inflation. <br> p. 469 |
| Demonstrates understanding that money purchases goods. <br> p. 207 | Identifies places where goods can be bought. p. 279 | Identifies different types of stores where goods or services can be bought. p. 343 | Chooses most appropriate places to buy goods and services, e.g. wholesale, retail, basic producer of goods. p. 409 | Compares and contrasts buying through different outlets, e.g. retail, wholesale, mail order. p. 470 |
| Accompanies adult on shopping expeditions. p. 207 | Locates some familiar items in store. p. 279 <br> With assistance, buys items independently with correct amount of money. p. 279 | Locates several items for purchase using various means. p. 343 <br> Buys items independently with correct amount of money, using a sighted guide if appropriate. p. 343 | Locates items for purchase, using various means. p. 409 |  |
|  | Recognizes advertising on television, radio, etc. <br> p. 279 | Recognizes advertising techniques. <br> p. 343 | ```Identifies factual informa- tion presented in advertisements. p. }40``` | Describes examples of misleading advertising on television, radio, newspaper. $\text { P. } 470$ |
| Demonstrates understanding that some things cost more than others. p. 207 | Demonstrates understanding that some things cost more than others. p. 279 | ```Demonstrates understanding that prices for familiar items vary from time to time. p. }34``` | Recognizes best time to shop. <br> p. 409 <br> Recognizes advantages of using neighborhood retail outlets to increase independence. p. 409 | Calculates bills accurately. <br> p. 470 <br> Demonstrates understanding of comparative shopping (goods and services). p. 470 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI LIVING VOCATIONAL SKills OVERVIEW

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: |
| Identifies and demonstrates  <br> the following actions: <br> bend fall <br> turn pull <br> push shake <br> stretch whirl <br> swing bounce <br> rise twist <br> sway beat. <br> p. 282  |  |  |  |
| Makes various shapes while still and while moving. <br> p. 282 |  |  |  |
| Identifies and demonstrates the following effort qualities: <br> Weight: firm, fine <br> Time: sudden, sustained <br> Space: direct, flexible <br> Flow: bound, free. <br> p. 282 |  |  |  |
| Recognizes general space versus personal space. p. 283 <br> Demonstrates levels in space, e.g. low, medium, high. p. 283 |  |  |  |
| Demonstrates pathways in space, e.g. floor patterns. p. 283 <br> Recognizes large, small, near and far, up and down. p. 283 |  |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| 4. Relationships With Objects | Throws, catches and controls small, slow moving objects. $\text { p. } 283$ <br> Travels under/over on small stationary pieces of apparatus. p. 283 <br> Jumps off low objects. $\text { p. } 283$ |  |  |  |
| 6. Gymnastics | Carries out a sequence of movements alone, in a group (s) or with a partner. $\text { p. } 283$ |  |  |  |
| 6. Gymnastics | Demonstrates various ways of transferring weight, <br> e.g. role, jump. p. 284 <br> Demonstrates various ways of supporting body weight, e.g. balance, hang. p. 284 <br> Demonstrates a sequence of movement varying in direction and level. p. 284 <br> Demonstrates the ability to use apparatus safely by: getting up, going along, going under, going over and getting off pieces of equipment. <br> p. 284 | Through participation demonstrates the basic skills associated with the following gymnastic themes: <br> - moves body from place to place in many ways; <br> - balances on, or suspends body from body parts; <br> - makes shapes while balancing or moving; <br> - keeps body symmetrical or asymmetrical when moving or balancing; <br> - twists and turns body when moving or balancing. <br> p. 346 | Participates in the following forms of gymnastics: <br> - tumbling/floor exercises <br> - uneven bars <br> - box horse <br> - balance beam <br> - rings <br> - parallel bars. <br> p. 413 | Participates in the following forms of gymnastics: <br> - tumbling/floor exercises <br> - uneven bars <br> - box horse <br> - balance beam <br> - rings <br> - parallel bars. <br> p. 473 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| Level 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| B. Games and Activities |  |  |  |  |
| 1. Creative Dance |  |  |  |  |
|  | Explores movements and describes accompanying feeling, e.g. bending, curling, stretching. p. 285 | Demonstrates basic skills of creative dance by participating in lessons based on selected Laban Themes: <br> - Theme IV: Direct and |  |  |
|  | Stresses body parts, e.g. repetitive foot movements in rhythmical phases. <br> p. 285 | flexible, bound and freeflow movement; <br> - Theme VIII: Activities of the whole body; |  |  |
|  | Controls transfers of movement. p. 285 <br> Controls balance. <br> p. 285 | - Theme VII: Basic effort actions; <br> - Themes IV, V, XV: Relationship Themes. <br> p. 347 |  |  |
|  | Designs and changes body shape. p. 285 |  |  |  |
|  | Utilizes space by changing size of space used, levels, directions, patterns. p. 285 |  |  |  |
|  | Communicates emotion and meaning through movement performed. p. 285 <br> Relates to a partner and to a group. p. 285 |  |  |  |
| 2. Folk and Round Dances |  |  |  |  |
|  |  | Demonstrates basic steps such as: walk, two step, schottische, waltz, polka, pas-dedeux, grapevine, step-swing and balance. $\text { p. } 347$ | Participates in the following dance forms: <br> - creative/modern <br> - square <br> - folk <br> - round <br> - jazz <br> - ballroom, etc. p. 414 | Participates in the following dance forms: <br> - creative/modern <br> - square <br> - folk <br> - round <br> - jazz <br> - ballroom, etc. p. 474 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| 3. Square Dance |  | Recognizes the ethnic differences between folk dance styles. P. 347 <br> Participates in no-partner, couple, trio, line and circle dances. p. 347 <br> Demonstrates basic square dance terms by participating in a variety of square dances. p. 348 |  |  |
| 4. Games | ```Participates in games which include: running and chasing, jumping, change of direction, quick start and stop, and tag. p. }28``` | ```Participates in games which develop skills which are pre- requisites or traditional dual and team sports. p. }34``` | Participates in selected games from the following categories: <br> - racket <br> - target <br> - relay <br> -tag. p. 414 <br> team: <br> - goal ball <br> - soccer <br> - hit-in baseball <br> - California kick baseball <br> - hockey. p. 414 | Participates in selected games from the following categories: <br> - racket <br> - target <br> -relay. p. 474 <br> team: <br> - goal ball <br> - soccer <br> - hit-in baseball <br> - California kick baseball <br> - hockey. p. 474 |
| 5. Posture | Describes good posture and demonstrates proper body alignment. p. 286 | Describes good posture and demonstrates proper body alignment. <br> p. 348 |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| 6. Swimming <br> Demonstrates understanding that water is potentially useful and/or dangerous. <br> p. 208 | Recognizes basic principles of the water medium and the relationships of the human body to these principles. p. 286 | ```Demonstrates yearly improve- ment following the Red Cross Water Safety Program. p. }34``` | Demonstrates fundamental swimming skills. p. 415 | Demonstrates fundamental <br> swimming skills. p. 475 |
| Participates in water activities. p. 208 | Participates in appropriate aquatics program. p. 286 <br> Demonstrates movement skills to propel the body through water in various ways. <br> p. 286 <br> Demonstrates ability to control the body in shallow and deep water. p. 286 <br> Practises water safety. p. 286 | Participates in appropriate aquatics program. p. 348 | Participates in: <br> - water games <br> - diving <br> - canoeing <br> - sailing <br> - synchronized swimming <br> - water safety activities. <br> p. 415 | Participates in: <br> - water games <br> - diving <br> - canoeing <br> - sailing <br> - synchronized swimming <br> - water safety activities. <br> p. 475 |
|  | Participates in some track and field activities. <br> p. 287 | Participates in track and field activities. p. 349 | Demonstrates the ability to: <br> - distance throw (shotput, discus, javelin) <br> - long jump <br> - high jump <br> - run (all distances, cross country). p. 415 | Demonstrates the ability to: <br> - distance throw (shotput, discus, javelin) <br> - long jump <br> - high jump <br> - run (all distances, cross country). <br> 475 |

VI LIVING VOCATIONAL SKILLS OVERVIEW


VI Living vocational skills overview

| LEVEL 2 | Level 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Paints directly with large brush on large paper. <br> p. 213 | Demonstrates awareness of differences and descriptive aspects of line-drawing. p. 295 | Demonstrates awareness of line and implied line-drawing. p. 357 | Demonstrates awareness of the power and scope of line, texture and value as individual elements and as elements in a total composition drawing. p. 422 | Demonstrates awareness of the power and scope of line, texture and value as individual elements and as elements in a total composition drawing. p. 482 |
|  | Demonstrates awareness of the forces of line, shape and color (painting). p. 295 | Demonstrates awareness of the forces of line, shape and color through tactual experiences using a variety of materials and media (painting). <br> p. 357 | Demonstrates awareness of the forces of line, shape and color through tactual experiences using a variety of materials and media (painting). <br> p. 422 | Demonstrates awareness of the forces of line, shape and color through tactual experiences using a variety of materials and media (painting). <br> p. 482 |
| 3. Modelling |  |  |  |  |
| Creates forms in wet and dry sand. p. 213 <br> Manipulates a variety of media. p. 213 | Using a variety of materials, demonstrates ability to create 3 -dimensional forms in such a way that understanding of the spatial elements (positive and negative) and textural and line qualities is promoted (sculpture). <br> p. 295 | Using a variety of materials, demonstrates ability to create 3 -dimensional forms in such a way that understanding of the spatial elements (positive and negative) and textural and line qualities is promoted (sculpture). p. 357 | Using a variety of materials, demonstrates ability to create 3 -dimensional forms in such a way that understanding of the spatial elements (positive and negative) and textural and line qualities is promoted (sculpture). p. 423 | Demonstrates ability to create 3 -dimensional forms in such a way that understanding the spatial elements and textural and line qualities is promoted (e.g. sculpture). p. 482 |
|  |  |  | Demonstrates understanding of the potentialities of synthetic media. p. 423 <br> Demonstrates ability in the various techniques of working with clay: decorating and firing ceramics and pottery. p. 424 | Demonstrates understanding of the potentialities of synthetic media. p. 483 <br> Demonstrates ability in the various techniques of working with clay: decorating and firing ceramics and pottery. p. 483 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| 4. Print Making |  |  |  |  |
| Demonstrates ability to print with familiar objects and textured tempera to create design on paper. p. 214 <br> 5. Weaving and Stitching | Demonstrates ability to feel, describe and depict simple textures in the environment (print making). p. 296 | Demonstrates awareness of variety of textures and their possibilities (print making). p. 357 | Demonstrates ability to express a progression of ideas and skills in print making. p. 424 | Demonstrates ability to experience progression of ideas and skills in print making. p. 484 |
| Creates simple needlework art. $\text { p. } 214$ | Demonstrates ability to make and decorate cloth through weaving and stitchery techniques as a means of relating the forces of line, shape, surface and color to the clothing and fabrics in his environment (fabric and fabric decoration). p. 296 | Demonstrates ability to make and decorate cloth through weaving and stitchery techniques (fabric and fabric decoration). p. 357 | Demonstrates awareness of how color and textural effects may be achieved and employed in a decorative manner (fabric and fabric decoration). $\text { P. } 425$ | Demonstrates awareness of how color and textural effects may be achieved and employed in a decorative manner (fabric and fabric decoration). $\text { p. } 484$ |
| C. Drama |  |  |  |  |
| Participates in dramatic play. $\text { p. } 215$ | ```Demonstrates relaxation, concentration and trust (in- dividual activities). p. 297``` | Demonstrates relaxation, concentration and trust (individual activities). p. 358 | Demonstrates ability to focus complete attention on a specific exercise. $\text { p. } 426$ | Demonstrates ability to focus complete attention on a specific exercise. p. 485 |
| Demonstrates personal expression through a variety of body movements. p. 215 | Demonstrates personal expression through using a variety of body movements (teacher directed). p. 297 | Demonstrates body movement in a variety of situations (nondirected). p. 358 | Demonstrates ability to express himself through movement. P. 426 | Demonstrates ability to express himself through movement. p. 485 |
|  | Demonstrates ability to respond through utilization of the five senses. p. 297 | Identifies environmental stimuli to the senses. $\text { p. } 358$ | Demonstrates awareness of the five senses and gathers more accurate information from the environment. $\text { p. } 426$ | Demonstrates awareness of the five senses. p. 485 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Expresses a variety of emotions using a variety of words, intonations, and body movements. <br> p. 215 |  | Demonstrates ability to communicate sensory experiences. $\text { p. } 358$ | Demonstrates ability to communicate a sensory experience so that others can experience it vicariously. p. 426 | Demonstrates increasing ability to communicate sensory experiences. $\text { p. } 485$ |
|  | Demonstrates ability to use imagination to respond to situations in a variety of ways. p. 297 | Demonstrates ability to use imagination to help improve characterization. p. 358 | Demonstrates ability to create original and interpretive thoughts and ideas. $\text { p. } 426$ |  |
|  | Demonstrates ability to communicate verbally and nonverbally. p. 297 | Demonstrates increased ability to communicate verbally and non-verbally. <br> p. 358 | Demonstrates ability to use communication techniques, including non-verbal techniques. <br> p. 426 |  |
|  | Demonstrates ability to alter voice and speech patterns. $\text { P. } 298$ | Communicates meaning by altering voice and speech patterns. p. 358 | Develops an awareness of anatomy of speech production. p. 426 | Demonstrates awareness of the more subtle aspects of the physiological processes of voice production. p. 486 |
|  | Discusses character's actions. $\text { p. } 298$ | Demonstrates knowledge of what creates a character, e.g. actions, appearance. $\text { p. } 358$ |  |  |
|  | Demonstrates ability to give simple actions to characters. $\text { p. } 298$ | Demonstrates ability to give speech or language to major characters. P. 359 | Demonstrates ability to react spontaneously, both verbally and through movement to a situation or stimuli. <br> p. 427 | Demonstrates ability to coordinate language, body and voice for effective communication. p. 486 |
|  |  |  | Demonstrates ability to coordinate language, body and voice for effective communication. p. 427 | Demonstrates ability in the areas of improvisation, characterization and acting. p. 486 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 3 | LEVEL 4 | LEVEL 5 | VEL |
| :---: | :---: | :---: | :---: |
| Demonstrates knowledge that a story is made up of related incidents. p. 298 <br> Demonstrates knowledge that an audience listens to, views, and enjoys a presentation. <br> p. 298 | Demonstrates understanding of the story sequence/plot. <br> p. 359 <br> Demonstrates awareness of various media enjoyed by our society. <br> p. 359 | Demonstrates awareness and appreciation fo the effect of mass media on society. p. 427 <br> Demonstrates ability to analyze characters developed in other sources and recreate these convincingly. <br> Demonstrates ability to build convincing characterizations based on why as well as who or what. p. 427 <br> Demonstrates knowledge of the mechanics of working audio-visual equipment. p. 428 <br> Demonstrates appreciation for various theatre forms. <br> p. 428 <br> Demonstrates ability to evaluate other people's work constructively. p. 428 <br> Demonstrates appreciation for dramatic literature through an introduction to the oneact play. p. 428 <br> Demonstrates appreciation for production techniques through an introduction to production elements, e.g. staging and make-up. p. 428 | Demonstrates understanding of director's purpose. p. 487 <br> Demonstrates ability to organize a play production. <br> p. 487 <br> Demonstrates ability in the area of stage management. <br> p. 488 <br> Demonstrates understanding of theatre history. p. 488 <br> Demonstrates ability to use constructive dramatic criticism. p. 488 <br> Demonstrates appreciation for dramatic literature through a variety of dramatic productions. p. 489 <br> Demonstrates understanding of the use of make-up and costumes. p. 489 |

Vi LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY <br> A. At Home |  |  |  |  |
| Identifies own family members by name. p. 216 | Identifies family members by role, name and responsibilities. p. 300 <br> Identifies ways in which immediate family is unique. $\text { p. } 300$ | Identifies various types of family units. p. 361 <br> Identifies ways in which extended family is unique. p. 361 | Identifies what constitutes a family from societal/legal perspective. p. 430 | Demonstrates awareness of changing types/roles of the family in society. p. 491 |
| Participates in family conversations, sharing own activities, ideas and feelings and listening to others. <br> p. 216 | Initiates family conversations. p. 300 |  |  |  |
| Begins to assume responsibility for self-care. p. 216 | Assumes responsibility for self appropriate to age, e.g. dressing self, snack preparation, keep room tidy. p. 300 | Assumes responsibilities within the family. p. 361 | Assumes responsibility within the family and the community. <br> p. 430 | Assumes roles and responsibilities associated with being an independent adult. p. 491 |
| Demonstrates the ability to respect and care for personal property, and that of other family members. p. 216 | Differentiates between personal, family and public property. <br> p. 300 | Assumes responsibility for personal property. p. 361 | Demonstrates responsible attitude towards property of self and others. p. 430 | Demonstrates responsible attitude towards property of self and others. p. 491 |
| Demonstrates awareness that family members share privileges and responsibilities. p. 217 | Identifies privileges and consequences associated with family roles and routines. <br> p. 300 | Identifies how roles and responsibilities change with age. p. 361 |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates awareness that families change over time. <br> p. 217 | Demonstrates awareness that families change over time. <br> p. 300 | Demonstrates awareness that families change because of separation and addition. <br> p. 361 | Identifies factors which cause change in families. p. 430 <br> Identifies agencies which influence the family. <br> p. 430 | Identifies and utilizes <br> strategies for coping <br> with change. p. 491 <br> Demonstrates understanding how to use community <br> agencies appropriately. p. 491 |
|  | Identifies and differentiates between community helpers. p. 300 | Identifies tasks associated with roles family members may assume in community. <br> p. 36.1 | Participates in community in a variety of roles. p. 430 | Participates in community in a variety of roles. <br> p. 491 |
| B. At School |  |  |  |  |
| Identifies classmates and staff members by name. p. 218 | Identifies classmates and significant staff members by role. p. 301 | Identifies classmates and majority of staff members with whom he deals by name or by role. p. 362 |  |  |
| Engages in solitary play with increasing purpose. p. 218 |  |  |  |  |
| Engages in parallel play. p. 218 |  |  |  |  |
| Participates in conversations demonstrating ability to listen and respond. p. 218 | Participates in conversations demonstrating ability to listen and respond. p. 301 |  |  |  |
| Demonstrates ability to care for personal property and the property of others. p. 219 | Accepts responsibility for personal property. p. 301 | Accepts responsibility for personal and public property. p. 362 | Accepts responsibility for personal and public property. <br> p. 431 |  |
| Engages in cooperative play. $\text { p. } 219$ |  |  |  |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Identifies some rules. p. 219 | Demonstrates respect for the personal property of others within the class. p. 301 <br> Identifies school rules. <br> p. 301 | Demonstrates respect for the personal property of others within the school. p. 362 | Demonstrates respect for the personal property of others. p. 431 | Demonstrates respect for the personal property of others. p. 492 |
|  | Participates in decisions regarding rules. p. 301 <br> Identifies privileges and consequences associated with school rules and routines. $\text { p. } 301$ | Participates in decisions regarding rules. p. 362 <br> Identifies privileges and consequences associated with school rules and routines. p. 362 | Participates in decisions regarding rules. <br> p. 431 <br> Identifies privileges and consequences associated with school rules and routines. $\text { p. } 431$ | Participates in decisions regarding rules. <br> p. 492 <br> Identifies privileges and consequences associated with school rules and routines. <br> p. 492 |
| Accepts some responsibility for own behavior. p. 219 | Accepts responsibility for own behavior and duties appropriate to age. p. 301 | Accepts responsibility for own behavior and duties appropriate to age. p. 362 | Accepts responsibility for own behavior and duties appropriate to age. <br> p. 431 | Accepts responsibility for own behavior and duties appropriate to age. <br> p. 492 |
| Responds to authority in the classroom and school. p. 219 | Responds to authority in the classroom and school. p. 301 | Responds to authority in the school and demonstrates understanding of the need for authority figures. p. 362 | Participates responsibly in delegating and electing authority figure. p. 431 | Assumes a delegated or elected position of authority in a responsible manner. $\text { p. } 492$ |
| C. In the Community |  |  |  |  |
| Demonstrates initial understanding of what constitutes a community. <br> p. 220 | Describes what constitutes a community. p. 302 | Defines a community and identifies its leadership. p. 363 |  |  |
| Identifies facilities available in a community and demonstrates understanding of the role of each facility. p. 220 | States the role and function of common neighborhood facilities. p. 302 | Identifies common city or town facilities. p. 363 | Identifies common provincial agencies and facilities. <br> p. 432 | Identifies federal agencies. $\text { p. } 493$ |
| Demonstrates understanding that individuals have various roles and responsibilities within the community. p. 220 | Identifies common community helpers. p. 302 | Identifies a wide range of helping professions. p. 363 | Identifies the role of common provincial helping agencies. $\text { p. } 432$ | Demonstrates ability to locate and utilize government services. p. 493 |

Vi living vocational skills overview

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates understanding that community members with various responsibilities have areas of authority. p. 220 | Demonstrates awareness of the concept of authority. p. 302 | Demonstrates awareness of how authority is obtained. p. 363 | Demonstrates understanding of how authority is exercised in a responsible manner. <br> p. 432 | Demonstrates understanding that diplomatic and trade relationships vary between countries. p. 493 |
| Demonstrates understanding that all individuals are members of communities, with community rights and responsibilities. p. 220 | Demonstrates understanding that all individuals are members of communities, with community rights and responsibilities. p. 302 | Demonstrates understanding that all individuals are members of communities, with community rights and responsibilities. p. 363 | Participates in community events and organization. p. 432 | Assumes responsibilities within community. p. 493 |
| Demonstrate's ability to name his community. p. 220 | States the name of his community, town or city, province. <br> p. 302 | States the name of his town or city, province, community, country and continent. <br> p. 363 |  |  |
|  |  | Demonstrates increasing understanding of what constitutes a town or city, a province and a country. p. 363 | Demonstrates understanding of different countries and forms of government in the world. <br> p. 432 | Demonstrates knowledge of the groupings of countries and the power blocks within the world. p. 493 |
|  | Identifies the Canadian Flag. p. 302 | Identifies and explains the symbolism in the Canadian Flag and National Anthem. p. 363 |  |  |
|  | Demonstrates awareness of cultural differences within own community. <br> p. 302 | Demonstrates awareness of cultural differences within own city or town. p. 363 <br> Identifies the role of civic leaders. p. 363 | Demonstrates awareness of cultural differences within Canada. p. 432 <br> Demonstrates awareness of authority figures and agencies within the province. p. 432 | Demonstrates awareness of cultural differences throughout the world. $\text { p. } 493$ |
|  |  |  | Identifies how laws are made and by whom. p. 432 | Demonstrates understanding of legal rights and responsibilities. p. 493 |


VI LIVING VOCATIONAL SKILLS OVERVIEW

Vi Living vocational skills overview

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Begins to assume responsibility for the care of a living organism. p. 222 <br> 2. Natural Phenomena | ```Assumes some responsibility for the care of a living organism. p. }30``` | Assumes responsibility tor the care of a living organism. p. 366 |  |  |
| Describes weather from outdoor conditions. <br> p. 223 | Describes weather from outdoor conditions. <br> p. 305 | Predicts weather from sky conditions/descriptions. <br> p. 366 | Demonstrates some understanding of natural disasters, e.g. earthquake. p. 434 | Demonstrates understanding of natural disasters, <br> e.g. tornado. p. 496 |
| Identifies some characteristics of each season. p. 223 | Identifies some characteristics of each season. | States characteristics of each season. <br> p. 366 |  |  |
|  | States how weather affects daily life. p. 305 | States how weather affects the life of others, e.g. farmer. p. 366 | Demonstrates knowledge of long term effects of weather, e.g. dry summer - poor crop. p. 434 | ```Demonstrates knowledge of economic and social effects of world's weather patterns. p. }49``` |
| 3. Energy |  |  |  |  |
| Identifies some sources of heat and light. p. 223 | Identifies sources of heat and light. p. 305 | Demonstrates knowledge of alternate energey sources, e.g. wood burning fire-places, solar heating. p. 366 | Demonstrates knowledge of alternate energy sources, e.g. coal, windmill. p. 435 | States advantages/ disadvantages of various energy sources. p. 496 |
|  | Recognizes the need to modify climate by such techniques as heating houses or clothing. <br> p. 305 | Demonstrates awareness that the energy used to heat his home and provide other utilities costs money. p. 367 | Demonstrates ability to make responsible energy choices in daily life. <br> p. 435 | ```Demonstrates responsibility in making energy- consumption decisions. p. }49``` |
| 4. Pollution |  |  |  |  |
| Demonstrates respect for the environment when travelling through it. p. 223 | Identifies and disposes of litter. p. 305 | Demonstrates awareness of a variety of environmental considerations, e.g. while walking, riding various vehicles. p. 367 | Demonstrates knowledge of the necessity for proper disposal methods when using outdoor facilities, e.g. cooking, toilet. p. 435 | Demonstrates correct disposal methods, e.g. napkins, dish water. p. 497 |

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates awareness that litter makes an unsightly mess and is difficult to clean up. p. 223 | States reasons for not littering. p. 306 | Recognizes importance of pollution control laws, including noise pollution. p. 367 | States fines that can be levied for littering, illegal dumping, improper weed control, etc. p. 435 | Demonstrates knowledge of the regulations in existence to protect the environment. |
| Recognizes clean air/water is necessary for good health. <br> p. 223 | Recognizes that clean air/ water is necessary for good health. <br> p. 306 | Recognizes those aspects of his world that are related to preserving his environmental safety. p. 368 | Recognizes that there are socially acceptable methods of showing his disapproval of environmentally damaging practices. <br> p. 435 | D. 498 <br> Recognizes his right to speak out if he sees an environmental offence that affects his enjoyment of nature or his health, e.g. smoking. p. 498 |
| Identifies several jobs and workers who help to keep the environment a better place, e.g. grounds-keeper, streetcleaners. p. 224 | Identifies several jobs and workers who help us to preserve the environment, e.g. grounds-keeper, streetcleaners, garbage collectors. p. 306 | Selects one field of work that is related to pollution control. p. 368 | Demonstrates knowledge of service industries to aid a community in sanitation and environmental areas. p. 436 | Examines ficlds of work that are carried out in the natural setting, ©.g. landscape worker, tree nursery worker, lumber or forestry worker. p. 498 |
|  |  |  | Demonstrates awareness of the contribution made by these industries, e.g. bottle depot workers, environmental control agencies, parks and wild-1ife workers. p. 436 | Demonstrates knowledge of (nvironmental service industries. p. 498 |
| 5. Conservation | Identifies places where noise control is required, e.g. library. p. 307 | Identities sources of excessive noise within the environment. <br> p. 368 | Demonstrates an awareness of the dangers of prolonged exposure to excessive noise. <br> p. 436 | Demonstrates awareness of the dangers of industrial noise, and an understanding of preventative measures. <br> p. 498 |
| Demonstrates some understanding of the recycling concept. <br> p. 225 | Demonstrates understanding of recycling concept. p. 307 | Saves recyclable materials and returns to appropriate place. p. 368 | Saves recyclable materials and returns to appropriate place. p. 436 |  |

VI LIVING VOCATIONAL SKILLS OVERVIEW

VI LIVING VOCATIONAL SKILLS OVERVIEW

| LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | LEVEL 6 |
| :---: | :---: | :---: | :---: | :---: |
| Demonstrates knowledge of the dangers inherent in everyday outdoor tools and chemicals. p. 226 | Demonstrates knowledge of the dangers inherent in everyday outdoor tools and chemicals, e.g. knives and axes, insect repellent sprays, camp-stove fuels, etc. p. 307 | Demonstrates safe use of everyday outdoor tools and chemicals. <br> p. 369 |  |  |
| Follows water safety rules. $\text { p. } 226$ | States, discusses and follows safety rules, e.g. never go swimming alone, never go into a boat without a life-jacket. p. 308 | Demonstrates knowledge of water safety rules. p. 369 | Demonstrates small-craft water safety. p. 436 <br> Demonstrates ability to swim and drown-proof. p. 437 | Practises water safety, e.g. swimming and boating. <br> p. 498 |
| Demonstrates awareness of the danger inherent in fire and the effect that it can have on the environment. p. 226 <br> Recognizes various unsafe outdoor practices, e.g. drinking water from unsafe sources, eating snow, eating wild berries, mushrooms. p. 227 | Demonstrates awareness of the danger inherent in fire and the effect that it can have on the environment. p. 308 <br> Demonstrates knowledge of various unsafe outdoor practises, e.g. drinking water from unsafe sources, eating snow, eating wild berries, mushrooms. p. 308 | Demonstrates knowledge of fire prevention methods. p. 369 |  |  |
|  |  | Practises safety rules that apply to the outdoors. p. 369 | Practises safety rules that apply to outdoors. $\text { p. } 437$ | Demonstrates competency and safety in the performance of several out-of-doors activities about the home, e.g. use of the lawn mower, care and use of a rototiller, proper use of a step or extension ladder. p. 499 |
|  |  | Recognizes people in positions of authority in parks, campsites and public outdoor centers. Demonstrates awareness of their ability to help in emergencies. p. 369 | Accepts direction from persons in authority in parks, etc. p. 437 | Demonstrates responsible behavior in parks, etc. p. 499 |
|  |  | Demonstrates a basic awareness of first aid for minor injuries, e.g. nettles, insect stings, small cuts, minor burns. p. 369 | Demonstrates some knowledge of disease transmitted by animals. p. 437 |  |

VI LIVING vOCATIONAL SKILLS OVERVIEW


APPENDIX B
STUDENT PROFILE/CHECKLIST

Student Profile

CHECKLIST - PLACEMENT \& ASSESSMENT FOR LEVELS 2 - 6

| Names and identifies body parts | Yes | No |  | Samples and begins to identify a wide variety of nutritious foods | Yes | No |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Demonstrates ability to obtain knowledge of the edible through his senses | Yes | No |  | Demonstrates an understanding that there are places to go for medical help | Yes | No |
| Identifies clothing and body parts | Yes | No | 3. | Identifies a variety of foods and their sources | Yes | No |
| Demonstrates ability to confirm particular taste | Yes | No |  | Recognizes the importance of having a family doctor or dentist | Yes | No |
|  |  |  | 5. | Identifies and classifies food into the four basic food groups | Yes | No |
|  |  |  | 6. | Identifies mental health personnel and their function | Yes | No |
|  |  |  | 7. | Demonstrates understanding of the role of nutrients for growth, health and energy | Yes | No |
|  |  |  | 8. | Identifies health service occupations | Yes | No |
|  |  |  | 9. | Demonstrates awareness of the relationships between nutrition, fatigue, illness and growth | Yes | No |
|  |  |  | 10. | Recognizes the contributions of the helping professions improving community health, e.g. medicine, dentistry, psychology, social work | Yes | No |
| SCORE: |  |  |  | SCORE: |  |  |

Instructions:
Circle the student responses to each question.
Add up the number of "Yes" responses and place on the score line.
Instructions for placement in levels of different areas appear on the Student Profile.
There are 10 components on the Checklist.
II. Orientation and Mobility
III. Health
 wide variety of nutritious foods ical help

## 

on
$\stackrel{』}{\Perp}$
4. Demonstrates ability to confirm


| Yes | No |
| :---: | :---: |
| Yes | No |
| Yes | No |
| Yes | No |
| Yes | No | Understanding Self and Getting

Along With Others
Demonstrates understanding of the
Demonstrates understanding of the
use of names
2. Demonstrates initial understanding the people have varying values,
customs and social expectations States/writes/brailles: name, age, address, telephone number
4. States simple rules and recognizes when they are broken
Identifies, demonstrates or describes some interests or preferences, abilities or talents, e.g.
sports, arts, cooking
6. Recognizes violation of basic societal values
Identifies significant public figures and the office held (Mayor, Premier) Demonstrates understanding of
need for protection of self and property
Identifies the need and function of self-identifying information,
e.g. I.D. Number, S.I.N.
Demonstrates understanding of the
concepts of human rights, e.g.
dignity and equality
SCORE:
CHECKLIST - PLACEMENT \& ASSESSMENT FOR LEVELS 2 - 6


Instructions for placement in levels of different areas appear on the Student Profile. There are 10 components on the Checklist.

## VIII. Motor Development \& Physical

No 1. Identifies types of movement body parts can do - bend, curl, twist

Practises water safety
2. Expresses a variety of emotions using a variety of words, in-

Demonstrates awareness of differences and descriptive aspects of line-drawing
IX. Fine Arts \& Individual Expression

Yes No
 Demonstrates knowledge that an
audience listens to, views and
enjoys a presentation

Demonstrates awareness of the forces of line, shape and color through tactual experiences using e.g. painting creates a character, e.g. actions,
appearance
Demonstrates knowledge of what

Demonstrates ability to express a
progression of ideas and skills in printmaking

Demonstrates appreciation for
production techniques through an introduction to production elements,
e.g. staging and make-up e.g. staging and make-up Demonstrates awareness of the
power and scope of line, texture
 and as elements in a total composition drawing
10. Demonstrates ability to use con
Instructions:
Circle the student responses to each question.
Add up the number of "Yes" responses and place
Instructions

| $\stackrel{0}{2}$ | $\bigcirc$ | O |
| :---: | :---: | :---: |
| ${\underset{\sim}{\infty}}_{\infty}^{\infty}$ | $\underset{\sim}{\infty}$ | $\sum_{2}^{n}$ | to place,

body parts
Describes good posture and demonstrates Yes No
proper body alignment
Yes No
No 울 $\stackrel{\circ}{2}$
Yes
Yes
$\stackrel{0}{0}$
Yes No 5. Participates in the following forms of gymnastics: tumbling, floor exercises, uneven bars, box horse, balance beam,
Participates in selected games in the following categories: racket, target,
Average or above average fitness level
$\because$
$\stackrel{\sim}{\infty} \stackrel{\text { ® }}{\infty}$

| $\stackrel{\circ}{2}$ | $\stackrel{\circ}{2}$ | $\bigcirc$ |
| :---: | :---: | :---: |
| $\stackrel{3}{8}$ | $\stackrel{\sim}{8}$ | ® |
| $>$ | $\underset{\sim}{\sim}$ | $\stackrel{\sim}{0}$ |

Yes No 6. Demonstrates fundamental swimming
4. Demonstrates knowledge that items or
5. Counts money, using coins and bills
6. Establishes a bank account advertising on television, radio, newspaper
10. Names institutions where savings can be kept: banks, credit unions, life insurance companies

that money can be saved and used at
a later date
3. Identifies coins and paper money

## VII. Money Management

1. Identifies money by touch
2. Chooses most appropriate places to buy goods and services, e.g. whole-
sale, retail, basic producer of goods 8. Describes circumstances when borrowing is appropriate

[^0]Scinn:
CHECKLIST - PLACEMENT \& ASSESSMENT FOR LEVELS 2 - 6
Instructions for placement in levels of different areas appear on the Student Profile.
There are 10 components on the Checklist.

> X. Citizenship \& Individual
> $\begin{aligned} & \text { Yes No } \\ & \text { Yes No }\end{aligned}$
> $\begin{aligned} & \text { Yes No } \\ & \text { Yes No }\end{aligned}$
> $\begin{aligned} & \text { Yes No } \\ & \text { Yes No }\end{aligned}$
> Yes No
> $\begin{aligned} & \text { Yes No } \\ & \text { Yes No }\end{aligned}$
> X. Responsibility
> 1. Identifies family members by name
> . Recognizes various unsafe outdoor practises, e.g. drinking water from wild berries, mushrooms, etc.
> 3. Identifies ways in which immediate
> family is unique
> 4. Demonstrates awareness of the dangers
> inherent in fire and the effect it
> can have on the environment
> $\begin{aligned} & \text { Assumes responsibilities within the } \\ & \text { family }\end{aligned}$
> 6. Demonstrates ability to go to
> appropriate locations if caught in
> weather
> 7. Identifies what constitutes a family
> rom a societal/legal perspective
> 8. Demonstrates ability to swim and
> drown-proof
> sətutitqicsuodsəa pue sətox səunssy $\cdot 6$ associated with being an independent
> 10. Demonstrates knowledge of possible dangers of various terrains
> SCORE:

APPENDIX C
RESOURCES

## LEVEL 1

Guide: A Developmental Skills Attainment System (formerly Vision-Up) Educational Products and Training Foundation.

The Oregon Project for Visually Impaired and Blind Preschool Children Jackson County Education Service District.

Wabash Guide to Early Developmental Training - Wabash Center for the Mentally Retarded.

## LEVEL 2

UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
Beginning With the Handicapped - Charles C. Thomas
Everybody Cries Sometimes - Educational Activities
Free To Be You and Me - McGraw-Hill
Garbage Delight - Houghton-Mifflin
Guide: A Developmental Skills Attainment System (formerly Vision-Up) Educational Products and Training Foundation

Heathers Feathers - Avon
I Like Myself - N.E.L.P.
The Learning Party - Educational Activities
T.A. for Tots - Jalmar Prod.

ORINETATION AND MOBILITY
Curziculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired - Illinois Office of Education

The Road to Freedom: A Parents Guide to Prepare the Blind Child to Travel Independently - Katan Pub.

## HEALTH

Alligator Pie - Houghton-Mifflin
Canada Food Guide - Department of Public Health
Cool Cooking for Kids - Fearon Pub.
Department of Agriculture Materials - Department of Agriculture
Garbage Delight - Houghton-Mifflin
Hap Palmer Records - J.M. Dent and Sons

```
Alberta Safety Council Materials - Alberta Safety Council
Early Bird Series - Random
Home Safe Home - Consumer and Corporate Affairs
Stories About Safety - Coronet Instructional Media
WORLD OF WORK
Attitude and Safety Posters - Workers Compensation Board of Alberta
Consumer Sequential Cards - Developmental Learning Materials
I.P.A. Manual - Alberta Education, 1980
Magic Circle - Human Development Training Institute
100 Ways to Enhance Self-Concept in the Classroom - Prentice-Hall Inc.
Self Awareness/Career Awareness - Scholar's Choice
What Do People Do? - Troll Associates
Workjobs for Parents - Addison Wesley
Workjobs I and II - Addison Wesley
HOME MANAGEMENT
Canada Food Guide - Department of Public Health
Cooking in the Classroom - Fearon Pitman Pub., Inc., 1974
Department of Agriculture Materials - Department of Agriculture
Guide for Parents of Preschool Visually Handicapped Children - Illinois State
Office of the Superintendent of Public Instruction
A Handbook for Parents of Preschool Blind Children - Ministry of Education,
Ontario, 1976
Kid's Garden Book - Nitty Gritty Productions
Kids' in the Kitchen - Peninsula Publishing
The Kids' Cookbook - Nitty Gritty Productions
What's Cooking? - Bowmar
```

The Oregon Project for Visually Impaired and Blind Preschool Children - Jackson County Education Service District

Pre-School Learning Activities for the Visually Impaired Child, A Guide for Parents - Illinois State Office of the Superintendent of Public Instruction

Wabash Guide to Early Development Training - University of Washington

## MONEY MANAGEMENT

Materials from Consumer and Corporate Affairs - Department of Consumer and Corporate Affairs

FINE ARTS AND INDIVIDUAL EXPRESSION
Creative Art for the Developing Child - Fearon-Pitman Pub. Ltd.
Creative Movement for the Developing Child - Fearon-Pitman Pub. Ltd.
Finger Play, Volumes One and Two from the Developing Body Space Perception Motor Skills Series - American Foundation for the Blind

Hap Palmer Records - J.M. Dent and Sons
I Can Make a Rainbow - Incentive Pub. Inc.
Introduction to Musical Instruments - Western Publishing Company
Movement Without Sight - Peek Publications
Play and Learn and Play and Learn 2 - Hart
Sounds Around the Home - Scott Foresman \& Co.
Sounds I Can Hear - Scott Foresman \& Co.
T.A. for Tots - Jalmar Prod.

CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
Free To Be You and Me - McGraw-Hill Pub. Co.
I.P.A. Manual - Alberta Education, 1980

Red Cross Posters - Red Cross Society
Red Riding Hood - Judy Co.
Snowy Day - Society for Visual Education
Three Bears - Judy Co.

All About Me - Frank Schaffer Publications, Inc.
The Body Image of Blind Children - American Foundation for the Blind
Braille Dymo Labler - American Printing House for the Blind
Child Behavior and Development - McGraw-Hill Book Co.
Concept Development for Visually Handicapped Children - American Foundation for the Blind
D.U.S.O. - Psycan

Fun Task Cards - Wise Owl
Getting to Know Myself (record) - J.M. Dent and Sons
Girls and Boys Book of Etiquette - American Printing House for the Blind Hap Palmer Records - J.M. Dent and Sons

How Do You Feel? - Child's World, Inc.
Instructional Programming for the Handicapped Student - Charles C. Thomas
Listen and Think, Level B - American Printing House for the Blind
Love is a Special Way of Feeling - Harcourt, Brace \& World, Inc.; American Printing House for the Blind (braille)

Magic Circle - Human Devleopment Training Institute
Peabody Language Development Kit - Psycan
Project Vision-Up Curriculum - A Training Program for Preschool Handicapped Children - United States Department of Health, Education and Welfare

Project Waverley Social Studies Curriculum - Edmonton Public School Board
Schools Without Failure - Harper and Row, Pubs., Inc.
Social Competency - Instructional Materials Reference Center for Visually Handicapped Children

Teacher Effectiveness Training - McKay
Teaching Social Behaviors to Young Children - Research Press

Touch and Tell Books - American Printing House for the Blind
The Visually Handicapped Child in the Regular Classroom - The John Day Co. Values Clarification: A Handbook of Practical Strategies - Hart Pub. Co.

## ORIENTATION AND MOBILITY

A Curriculum Guide for the Development of Body and Sensory Awareness in the Visually Impaired - State Board of Education, Illinois Office of Education

The Road to Freedom: A Parent's Guide to Prepare the Blind Child to Travel Independently - Katan Publications

## HEALTH

Calgary Milk Foundation - Calgary Milk Foundation
Canada Food Guide - Department of Public Health
General Foods Corporation Materials - General Foods Corporation
Growth: A Handbook of Classroom Ideas to Motivate the Teachings of Elementary Health - Educational Services, Inc.

Health and Safety for the Young Child - Fearon Publishers
Learning About Fruits We Eat (captioned film) - Media Services and Captioned Films
Medical Kit - Fisher-Price
Nutrition Communication - Ontario Milk Marketing Board
Peabody Language Development Kit - Psycan
Peabody Song Kit - Psycan
SAVI Kit - (Lawrence Hall of Science) University of California, Berkeley
Sex Education and Family Life for Visually Handicapped Children and Youth: A Resource Guide - American Foundation for the Blind

Sex Education for the Visually Handicapped in Schools and Agencies (selected papers) - American Foundation for the Blind

Spice Series - Educational Performance Association
A Step-By-Step Guide to Personal Management for Blind Persons (2nd edition) American Foundation for the Blind

## SAFETY

Curriculum Guide for Elementary Health - Alberta Education
Dangerous Playground (film) - McGraw-Hill
Early Childhood Traffic Education - Alberta Motor Association
Elmer the Safety Elephant - Alberta Safety Council
The Eyes Have It - National Society for the Prevention of Blindness
The Fall Down, Break a Bone, Skin Your Knee Book - Walker \& Co.
Fire in Town (film) - National Film Board
Fire Safety, Grade One - Edmonton Catholic School Board and the City of Edmonton Fire Department

Health and Safety for the Young Child - Fearon-Pitman Publishers
Home Safety Kit - Alberta Safety Council
How to Have an Accident in the Home/at Work (films) - Magic Lantern
Illinois Curriculum Guide for the Development of Body and Sensory Awareness Illinois Office of Education

I'm No Fool Having Fun - Magic Lantern
I'm No Fool With Electricity - Magic Lantern
I'm No Fool With Fire - Magic Lantern
Let's Find Out About Safety - American Printing House for the Blind
The New Elmer the Safety Elephant - Alberta Safety Council
Peabody Song Kit - Psycan
Playground Safety (film) - McGraw-Hill
Safety After School (film) - McGraw-Hill

A Good Worker - Mafex Associates Inc.

Attitude and Safety Posters - Workers Compensation Board of Alberta Career Awareness - Scholar's Choice

Career Cards - Milton Bradley

Courtesy in the Community - Children's Press Inc.
D.U.S.O. - Psycan

Deal Me In - J. Norton Publishers

Getting a Job - Fearon Publishers
I.P.A. Manual - Alberta Education

I Want To Be ... Books - Children's Press Inc.
Ladybird Books - Scholar's Choice
Listen and Think Series - American Printing House for the Blind

Modern Workers for Career Awareness - Scholar's Choice
Our Helpers - Milton Bradley
Si:n-A-Mite - Mafex Associates, Inc.
Stories About Workers - Richards Pub.

Unemployed Uglies - Frank E. Richards Publishing Co., Inc.
Workjobs I and II - Addison Wesley

HOME MANAGEMENT

ABC Cookery - Argus Communications

Button Up: A Systematic Approach for Teaching Children to Fasten - Teaching Exceptional Children

The First Book of Supermarkets - American Printing House for the Blind Food at Your Fingertips - American Printing House for the Blind

Kids Cooking - American Printing House for the Blind
Kids in the Kitchen - Peninsula Publications
Learning About Fruits We Eat (captioned film) - Media Services and Captioned Films
Lessons in Living - Ginn and Company
Look and Cook Nutrition Basics - Chrome Yellow Films, Inc.
Materials Directory Trade News - National Home Sewing Assoc.
Nutrition Communication - Ontario Milk Marketing Board
Peabody Song Kit - Psycan
Sew It Yourself: How to Make Your Own Fashion Classics - Gage Educational Publishing, Ltd.

Social Competency - Instructional Materials Reference Center for Visually Handicapped Children

Towards Independence: The Use of Instructional Objectives in Teaching Daily Living Skills to the Blind - American Foundation for the Blind

## MONEY MANAGEMENT

Good Cents: Every Kids Guide to Making Money - Houghton-Mifflin Company
Let's Go Shopping - CTES Audio Visual Resource
Money Makes Sense - Copp Clark
One Penny, Two Penny - Sutherland Publishing Co.

MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES
Adapted Physical Education and Recreation: A Multi-Disciplinary Approach William C. Brown, Co. Pubs.

Aud-A-Ball - Sensory Aids Corp.
Audible Ball - American Foundation for the Blind
Basic Movement (film loops) - National Collegiate Athletic Association Films
Basic Movement Activities - Fearon Publishers

MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES (cont'd.)
Concept Development for Visually Handicapped Children - American Foundation for the Blind

Educational Gymnastics - Inner London Council
Elementary Physical Education - Alberta Education
Introduction to Movement Education - An Individualized Approach - Wm. C. Brown Movement Education: Theory and Practise - Follett Publishing Co.

Movement Without Sight - Peek Publications
Physical Education - A Movement Orientation - McGraw-Hill
Swimming for the Handicapped - Red Cross Society
Swimming for Children with Physical and Sensory Impairments - Charles C. Thomas

FINE ARTS AND INDIVIDUAL EXPRESSION
Child Drama in Action, A Practical Manual for Teachers - Gage Educational Publishing Ltd.

Creative Clay Work - Stirling
Creative Drama in the Elementary School - F.E. Peacock Publishers, Inc.
Curriculum Guide for Elementary Music - Alberta Education
Drawing: Ideas, Materials and Techniques - Davis Publications, Inc.
E.P.S.B. Music Curriculum - Edmonton Public School Board

Elementary Art Curriculum Guide - Alberta Education
Exploring With Paint - Reinhold Pub., Co.
I Can Make a Rainbow - Incentive Publications Inc.
Learning to Listen to Music - Silver Burdett
Music for Fun - Holt, Rinehart and Winston
Play Acting in the Schools - The Ryerson Press
A Practical Knowledge of Color for the Congenitally Blind - The New Outlook Relief Printmaking - Davis Publishing

Teaching Art to the Blind Child Integrated With Sighted Children - The New Outlook Teaching With Creative Dramatics - Copp Clark Publishing

Creative Science Experiences for the Young Child - Incentive Pubs.
Let's Find the Pollution Solution - January Productions
Pollution Solutions Mobile - Thomas Howe \& Assoc.

Take a Look at Nature - Creative Teaching Press

## LEVEL 4

UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS

All About You - Science Research Assoc.

Braille Representations of Sexual Organs - Materials Resource Centre, Alberta Education

Centering Book: Awareness Activities for Children, Parents and Teachers -Prentice-Hall Inc.

Conflict Management - Princeton University Press
D.U.S.O. - Psycan

Focus on Self Development, Stages 1 and 2 - Science Research Assoc.

Getting to Know Myself - J.M. Dent and Sons

Girls and Boys Book of Etiquette - American Printing House for the Blind

Got To Be Me - Argus Communications

Human Crowth - American Printing House for the Blind
Interaction SEries - Raintree Publishers Ltd.
Magic Circle - Human Development Training Institute
Mostly Me - Good Apple Inc.

Schools Without Failure - Harper and Row Pubs.

Sex Education and Family Life for Visually Handicapped Children and Youth: A
Resource Guide - American Foundation for the Blind

Social Learning Curriculum Kits - Charles E. Merrill Pub. Co., Inc.

Teacher Effectiveness Training - McKay

Toward Affective Development - Psycan

Values Clarification - Handbook of Practical Strategies - Hart Pub. Co. Inc.

About Drugs - Fearon Publishers
Alcohol: Facts for Decisions - New Readers Press

A11 About the Human Body - Random House; American Printing House for the Blind Almost Everyone Does - Wombat Productions

Basic Health and Safety Program - American Printing House for the Blind
Canada Food Guide - Department of Public Health

Drugs: Facts for Decisions - New Readers Press
Easy Way Out - Film Media Services and Captioned Films
Emergency Room - American Printing House for the Blind

The First Book of Physical Fitness - American Printing House for the Blind

General Foods Corporation Materials - General Foods Corporation
Growth: A Handbook of Classroom Ideas to Motivate the Teaching of Elementary Health - Educational Services, Inc.

Manners Made Easy - American Printing House for the Blind

Nutrition Communication - Ontario Milk Marketing Board
Sex Education and Family Life for Visually Handicapped Children and Youth: A Resource Guide - American Foundation for the Blind

Sex Education for the Visually Handicapped in Schools and Agencies (selected papers) - American Foundation for the Blind

The Spice Series - Educational Performance Associates

To Smoke or Not To Smoke - Lothrop, Lee, and Shepard Co.; American Printing House for the Blind

What You Should Know About Drugs - Harcourt, Brace, Jovanovich; American Printing House for the Blind

You and Your Food (braille) - American Printing House for the Blind

## SAFETY

Alberta Safety Council - Alberta Safety Council

The Eyes Have It - National Society for the Prevention of Blindness

First Aid Manual - Canadian Red Cross
The New Elmer the Safety Elephant - Alberta Safety Council
Playground Safety - McGraw-Hill Book Co.
Teachers Manual for Fire Prevention - Department of Education
Teaching Children Safety - Educational Activities, Inc.

WORLD OF WORK
Attitude and Safety Posters - Workers Compensation Board of Alberta
At Least a Thousand Things To Do - Incentive Publications Inc.
Canadian and Classification Dictionary of Occupations - Dept. of Manpower \& Immigratio
Career Awareness Books - Scholar's Choice
Career Cards - Milton Bradley
Career Exploration - Activity Cards for Fun - Frank Schaffer Pubs., Inc.
Career Loto - Western Educational Activities
Career Workbook -
Cook and Learn -
Courtesy in the Community - Children's Press Inc.
Deal Me In - J. Norton Pubs.
Fair and Unfair (film) -
Following Directions - Barnell Loft
Getting a Job - Fearon Publishers; American Printing House for the Blind
A Good Worker - Mafex Associates Inc.
How to Get That Job - Mafex Associates Inc.
I.P.A. Manual - Alberta Education

It's Positively Fun - Spirit Master
Job Attitudes - Mafex Associates Inc.
Jobs From "A to Z" - Frank E. Richards Pub. Co., Inc.
Kids in the Kitchen - Peninsula Pub.

Kids Stuff - Incentive Publications
Listen and Think Series - American Printing House for the Blind
Making It On Your Own - Mafex Associates, Inc.
Manners - Frank E. Richards Pub. Co. Inc.
Occupational Alphabet - Western Educational Activities
100 Ways to Enhance Self-Concept in the Classroom - Prentice-Hall
Perhaps I'11 Be Series - Aladin Books
Shop Safety (films) - Coronet Instructional Media
A Special Picture Cookbook - H \& H Enterprises
Sign-A-Mite - Mafex Associates, Inc.
Stories About Workers - Frank E. Richards Pub. Co., Inc.
Young Homemaker's Series - Fearon-Pitman Pub. Inc.

## HOME MANAGEMENT

Around America: A Cookbook for Young People - American Printing House for the Blind

Around the World in 80 Dishes - American Printing House for the Blind
Calgary Milk Foundation Materials - Calgary Milk Foundation
Dishes and Utensils Instruction Lab - Scholar's Choice
Everyday Machines and How They Work - American Printing House for the Blind
The First Book of Supermarkets - American Printing House for the Blind
How You Look and Dress - American Printing House for the Blind
The Kids Cookbook - Nitty Gritty Productions
Kids Cooking - American Printing House for the B1ind
Lessons in Living - Ginn and Company
Look and Cook Nutrition Basics - Chrome Yellow Films, Inc.
Nutrition Communication - Ontario Milk Marketing Board
Sew It Yourself - Gage Educational Pub. Ltd.

A Step-By-Step Guide to Personal Management for Blind Persons (2nd edition) American Foundation for the Blind

Social Competency - Instructional Materials Reference Center for Visually Handicapped Children

Towards Independence: The Use of Instructional Objectives in Teaching Daily Living Skills to the Blind - American Foundation for the Blind

MONEY MANAGEMENT
A Course in Coins - Mafex Associates, Inc.
Department Store Math - Western Educational Activities
Good Cents: Every Kids Guide to Making Money - Houghton-Mifflin
Guide to the Community - Elwyn Institute
Let's Go Shopping - CTES Audio Visual Resource
Managing Your Money - Raintree Publications
Mathematics for Adult Living - Mafex Associates, Inc.
Mathematics for Banking - Mafex Associates, Inc.
Money Math - Mafex Associates, Inc.
Money Matters - Creative Publications
Nemeth Code: Braille Handbook - San Francisco State College
Shopping Lists - Developmental Learning Materials
Speech + (Plus): The Talking Calculator - Telesensory Systems, Inc.
The Story of Money - Mafex Associates, Inc.
Using Money Series - Frank E. Richards Pub. Co., Inc.
Your Family and It's Money - Houghton-Mifflin Co.

MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES
Active Games for the Blind - American Printing House for the Blind
Adapted Physical Education and Recreation: A Multi-Disciplinary Approach William C. Brown Co. Pubs.

Aud-I-Ball - Sensory Aids Corp.

```
Audible Ball - American Foundation for the Blind
The CAHPER Fitness Test -
Canadian Fitness Awards -
Creative Dance, Volumes I and II -
Folk Dancing for Students and Teachers -
Kids Camping - American Printing House for the Blind
Movement Without Sight - Peek Publications
Physical Education and Recreation for the Visually Handicapped - AAPHER
Swimming for Children With Physical and Sensory Impairments - Charles C. Thomas Pub.
Swimming for the Handicapped - Red Cross Society
```

FINE ARTS AND INDIVIDUAL EXPRESSION
Creative Drama in the Elementary School - F.E. Peacock Publishers, Inc.
Creative Dramatics and English Teaching - Urbana: National Council of Teachers
of English
Creative Drawing: Point and Line - Van Nostrand-Reinhold
Curriculum Guide for Elementary Music - Alberta Education
Drawing: Ideas, Materials and Techniques - Davis Publications
E.P.B.S. Music Curriculum - Edmonton Public School Board
Educational Drama for Six to Twelve Year Olds - Methuen Publications
Exploring With Paint - Reinhold Publishing Corp.
I Can Make a Rainbow - Incentive Publications, Inc.
Learning to Listen to Music - Silver Burdett
Music for Fun - Holt, Rinehart and Winston
Play Acting in the Schools - The Ryerson Press
Teaching With Creative Dramatics - Copp Clark Publishing

```
A Citizen's Handbook on Waste Management and Recycling - Ontario Ministry
of Environment
ECO, A Handbook of Classroom Ideas - Educational Performance Activities
Energy Conservation Cut-outs - Burbank
The Garbage Book - Ottawa Dept. of Energy, Mines and Resources
Garbage Gus Poster - Office of Energy Conservation, Ottawa
Government Environmental Resource Guide - Alberta Environment
Home and Family - Cemrel Inc.
Living Well in Times of Scarcity - Pollution Probe and Consumers Association
Man and His Communities - Benefic Press
Man and His Families - Benefic Press
Outdoor Education Handbook - Yaleuka Enterprises
```

About Brothers and Sisters - American Printing House for the Blind

Activities for Developing Positive Self-Awareness - Miliken Pub. Co.
All About You - Bowmar-Noble Publishing Co.
Becoming a Good Leader - American Printing House for the Blind

Braille Representations of Sexual Organs - Materials Resource Centre, Dept. of Education

Co.R.T. - University of Alberta
Dating Tips for Teens (braille) - American Printing House for the Blind
Dimensions for Living - Lethbridge School District \#5l
Exploring Your Personality - American Printing House for the Blind
The Family You Belong To - American Printing House for the Blind
Getting Along With Others - American Printing House for the Blind
Getting Along With Parents - American Printing House for the Blind
Girls and Sex - American Printing House for the Blind
Gregg/McGraw-Hill Series for Independent Living - McGraw-Hill Book Co.
Growing Up Emotionally - American Printing House for the Blind
Growing Up Socially - American Printing House for the Blind

Guide to Modern Meals - McGraw-Hill Book Co.

How to Get Along With Others - J. Weston Walch Publishers

How to Increase Your Self-Confidence - American Printing House for the Blind
How to Live With Parents - American Printing House for the Blind

How to Talk Better - American Printing House for the Blind

Human Growth - Harcourt, Brace, Jovanovich; American Printing House for the Blind

Innerchange: A Journey Into Self-Learning Through Group Interaction - Human Development Training Institute

Lifeline Materials - Developmental Learning Materials
Looking Ahead to Marriage - American Printing House for the Blind
Love and Sex in Plain Language - Bantam Book Inc.
Magic Circle - Human Development Training Institute
Making and Keeping Friends - American Printing House for the Blind
Parent Effectiveness Training - David McKay Co. Inc.
Physical Disability: A Psychological Approach -
SRA Guidance Series - Science Research Associates
Schools Without Failure - Harper and Row Pubs. Inc.

Sex Education and Family Life for Visually Handicapped Children and Youth: A Resource Guide - American Foundation for the Blind

Se:.: Telling It Straight - American Printing House for the Blind
Stage Three: Focus on Self-Development-Involvement - Science Research Associates
Teacher Effectiveness Training - David McKay Co. Inc.
Today's Teen Series - Charles A. Bennett
Toward Affective Development - Psycan
Understanding Dating Relationships - American Printing House for the Blind
Understanding Yourself - American Printing House for the Blind
Values Clarification - Hart Publishing Co. Inc.
Values for Health - Fearon Publishers, Inc.
Your Problems: How To Handle Them - American Printing House for the Blind
Youth and Sex: Pleasure and Responsibility - Nelson-Hall Inc.

About Drugs - Fearon Publishers
Alcoholics Anonymous - Alcoholics Anonymous
A11 About the Human Body - Random House; American Printing House for the Blind Battling Disease - Globe Book Co.

Birthright - Birthright
Canada Food Guide - Department of Public Health
Curriculum Guide for Junior High School Health - Department of Education

Diet for a Small Planet - Viking Films

Drugs: Facts on Their Use and Abuse - Scott Foresman and Co.; American Printing House for the Blind

Emergency Room - American Printing House for the Blind

Facts About Alcohol - Scientific Research Associates; American Printing House for the Blind

Facts About Narcotics and Dangerous Drugs - Scientific Research Associates; American Printing House for the Blind

Facts About Smoking and Health - Scientific Research Associates; American Printing House for the Blind

Facts About Veneral Disease - Scientific Research Associates; American Printing House for the Blind

The First Book of Physical Fitness - American Printing House for the Blind

Food and Your Weight - American Printing House for the Blind

How a Hamburger Runs Into You - Viking Films
Human Growth - Harcourt, Brace, Jovanovich; American Printing House for the Blind
LSD - Insight or Insanity - BFA Educational Media

Manners Made Easy - American Printing House for the B1ind
Our Wonderful Eyes and Their Care - Media Services and Captioned Films

Protecting Your Health - CEBCO Standard, Pub.

Sex Education for the Visually Handicapped in Schools and Agencies (selected papers) - American Foundation for the Blind

## HEALTH (cont'd.)

Sex Education and Family Life for Visually Handicapped Children and Youth: A Resource Guide - American Foundation for the Blind

Smoke Screen - Pyramid Films
Smoking, Health and You - U.S. Dept. of Health, Education and Welfare;
American Printing House for the Blind
Smoking, It's Your Choice - Media Services and Captioned Films
Smoking, Your Choice Between Life and Death - American Printing House for the Blind
A Step-By-Step Guide to Personal Management for Blind Persons (2nd edition) American Foundation for the Blind

Teaching Resources for Secondary School Home Economics - Alberta Education Teen Guide to Homemaking - American Printing House for the Blind

A Teen-Age Guide to Healthy Skin and Hair - Clarke, Irwin, and Co.; American Printing House for the Blind

Teeth White, Teeth Bright - International Tele-film Enterprises
Ten Little People and Their Teeth - Bowmar
To Smoke or Not To Smoke - Lothrop, Lee and Shepard Co.; American Printing House for the Blind

Tommy's Healthy Teeth - Media Services and Captioned Films
V.D.: Facts You Should Know - Scott, Foresman and Co.; American Printing House for the Blind

Values for Health - Fearon Publishers, Inc.
What You Should Know About Drugs - Harcourt, Brace, Jovanovich; American Printing House for the Blind

What You Should Know About Drugs and Drug Abuse - American Printing House for the Blind

What You Should Know About Smoking and Drinking - Science Research Associates; American Printing House for the Blind

You and Your Ears - Walt Disney Educational Materials Co.
You and Your Eyes - Walt Disney Educational Materials Co.
You and Your Food - American Printing House for the Blind
You and Your Health - Science Research Associates; American Printing House for the Blind

You're Maturing Now - American Printing House for the Blind Youth and the Drug Problem - American Printing House for the Blind

## SAFETY

Avoiding Accidents: Safety and First Aid - Globe Book Co. Inc.
Curriculum Guide for Junior High School Health - Dept. of Education
Fire Safety is Your Department - Centron Educational Films
First Aid on the Spot - Encyclopedia Britannica Educational Corp.
Play It Safe - Learning Tree Filmstrips
Playground Safety - McGraw-Hill Book Co.
Red Cross Materials - Red Cross Society
Safety Adventure Out of Doors - Encyclopedia Britannica Educational Corp.
Safety In the Home - Media Services and Captioned Films
Smartest Kid in Town - National Society for the Prevention of Blindness
Standard First Aid and Personal Safety - Doubleday and Company
Values for Health - Fearon Publishers, Inc.
Water Safety - National Film Board of Canada

WORLD OF WORK
Accent/World of Work - Follett Pub. Co.
All About Jobs - Mafex Associates, Inc.
Attitude and Safety Posters - Workers Compensation Board of Alberta
Career Awareness - KSP
Career Choices for the $70^{\prime}$ s - American Printing House for the Blind
Career Search - Scholastic Book Services
Don't Get Fired - 13 Ways to Hold Your Job - Janus Book Pub.
Exploring the World of Jobs - Science Research Associates; American Printing House for the Blind

WORLD OF WORK (cont'd.)
Finding Part-Time Jobs - Scientific Research Associates; American Printing House for the Blind

Getting a Job - Fearon Pub.
Getting Ahead in Your Job - Society for Visual Education
Getting That Job - American Printing Hosue for the Blind
Good Work Habits - Mafex Associates, Inc.
A Good Worker - Mafex Associates, Inc.
Help! - Mafex Associates, Inc.
How Teenagers Can Get Good Jobs: Applications for Positions - Rosen Pr.
How to Get a Job - American Printing House for the Blind
How to Get That Job - Mafex Associates, Inc.
I Want a Job - Frank E. Richards Pub. Co., Inc.
I'm Going to Work - Mafex Associates, Inc.
Janus Job Planner - Janus Book Pub.
The job Box Vocational Resource Module F - Fearon Publishers, Inc.
Job in Your Future - Science Research Associates; American Printing House for the Blind

Jobs From "A to Z" - Frank E. Richards Pub. Co., Inc.
Jobs You Get - American Printing House for the Blind
Keep Up the Good Work - Pith Press
Keeping That Job - American Printing House for the Blind
Lifeskills Essential Curriculum Materials for Secondary Students 1978/79
Catalogue/Junior and Senior High/Adult and Special Education - Lakeshore
Curriculum Materials
The Long Hair Men - National Film Board
My Job Application File (2nd edition) - Janus Book Pub.
The Nature of Work - National Film Board
On the Job - Book Society of Canada

PATH - Positive Attitudes Towards the Handicapped - Alberta Education
Perceptual Communication Skills: Developing Auditory Awareness - Instructional Materials and Equipment Distributors

Preparing for a Job Interview - Frank E. Richards Pub. Co., Inc.
Reference Manual for Office Personnel - American Printing House for the Blind Service Occupations - Frank E. Richards Pub. Co., Inc.

So You Want a Job, Eh? - Canadian Broadcasting Corp.
Stories About Workers - Frank E. Richards Pub. Co., Inc.
The Turner Career Guidance Series l-6-Follett Pub. Co.
Work for Everyone - Frank E. Richards Pub. Co., Inc.
World of Work Series - Educational Resources Division
Workers Compensation Board Materials - Workers Compensation Board
You and Your Occupation - American Printing House for the B1ind

You and Your Pay - American Printing House for the Blind
You and Your World - Scholastic Book Services
Your Career If You're Not Going to College - American Printing House for the Blind

HOME MANAGEMENT
Around America: A Cookbook for Young People - American Printing House for the Blind

Around the World in 80 Dishes - American Printing House for the Blind Baby-Sitters Handbook - American Printing House for the Blind Betty Crocker's Cookbook - Bantam; American Printing House for the Blind Beyond T.V. Dinners - Living Skills Centre for the V.I.

The Braille Cookbook - American Printing House for the Blind Calgary Milk Foundation Materials - Calgary Milk Foundation Cooking Without Recipes - American Printing House for the Blind The Cooks Companion - American Printing House for the Blind

HOME MANAGEMENT (cont'd.)
Dept. of Foods and Nutrition - Dept. of Foods and Nutrition
Everyday Machines and How They Work - American Printing House for the Blind Family Meals and Hospitality - American Printing House for the Blind Food at Your Fingertips - American Printing House for the Blind Food Facts for Young People - American Printing House for the Blind General Foods Corp. Materials - General Foods Corp.

The Home: It's Furnishings and Equipment - American Printing House for the Blind; McGraw-Hill Inc.

Homemaking for Teenagers, Book 1 - American Printing House for the Blind
How Does It Work - Doubleday; American Printing House for the Blind
How to Plan and Prepare Meals - American Printing House for the Blind
How You Look and Dress - American Printing House for the Blind
Lessons in Living - Ginn and Company
Nutrition Communication - Ontario Milk Marketing Board
Preprimer Cooking or Cooking Techniques for the Blind -
Sew It Yourself - Gage Educational Publishing
Sewing Manual - Illinois Community Services for the V.I.
Sewing Techniques for Blind Girls - American Printing House for the Blind
So What About Sewing, A Complete Guide - Services for the Visually Impaired
Social Competency - Instructional Materials Reference Center for Visually Handicapped Children

A Step-By-Step Guide to Personal Management for Blind Persons (2nd edition) American Foundation for the Blind

Student's Notebook - A Cooking Manual for Studetns Who Like to Cook - American Printing House for the Blind

Teen Guide to Homemaking - American Printing House for the Blind
The Teenagers Menu Cookbook - Dood Mead and Co.; American Printing House for the Blind

Towards Independence: The Use of Instructional Objectives in Teaching Daily Living Skills to the Blind - American Foundation for the Blind

## MONEY MANAGEMENT

Bank Account - Western Educational Activities
The Bank Book - Frank E. Richards Pub. Co., Inc.
Banking, Budgeting, and Employment - Frank E. Richards Pub. Co., Inc.
Big Deal - Western Educational Activities
Checking Accounts, Checks and Stubs - Mafex Associates, Inc.
Classroom Money Management Kit - CUNA Mutual Insurance Society
Consumer Education Materials: An Annotated List from Alberta Consumer and Corporate Affairs - Alberta Education

A Course in Coins - Mafex Associates, Inc.
Department Store Math - Western Educational Activities
Food Buymanship - Consumers Association of Canada
Getting Applications Right - Scholastic Books
Getting Ready for Payday - Frank E. Richards Pub. Co. Inc.
How Money and Credit Help Us - Benefic Press
Let's Go Shopping - CTES Audio Visual Resource
Lifeskills Essential Curriculum Materials for Secondary Students 1978/79 Catalogue/Junior and Senior High/Adult and Special Education - Lakeshore Curriculum Materials

Making the Most of Your Money - American Printing House for the Blind
Mathematics for Adult Living - Mafex Associates, Inc.
Mathematics for Banking - Mafex Associates, Inc.
Mathematics for Citizenship - Mafex Associates, Inc.; American Printing House for the Blind

Mathematics for Family Living - Mafex Associates, Inc.; American Printing House for the Blind

Mathematics for the Worker - Mafex Associates, Inc.
Money and the Kids: How to Earn It, Save It and Spend It - American Printing House for the Blind

Money Makes Sense (Canadian Edition) - Copp Clark
Money Management - Mcgraw-Hill

MONEY MANAGEMENT (cont'd.)
Money Math - Mafex Associates, Inc.
Money Matters - Creative Publications
Money You Spend - American Printing House for the Blind
Nemeth Code: Braille Handbook - San Francisco State College
Pacemaker Practical Arithmetic Series - Copp Clark
Speech + (Plus): The Talking Calculator - Telesensory Systems, Inc.
Supershopper - Guide to Spending and Saving - Book Society of Canada; American Printing House for the Blind

Using Money Series - Frank E. Richards Pub. Co., Inc.
Wages, Salaries and Paycheques - Mafex Associates, Inc.
Working Makes Sense - Copp Clark
You and Your Pay - American Printing House for the Blind
Your Money Matters - Royal Bank
Your World of Money - Canadian Broadcasting Corp.

MOT'JR DEVELOPMENT AND PHYSICAL ACTIVITIES
Active Games for the Blind - American Printing House for the Blind
Adapted Physical Education and Recreation: A Multi-Disciplinary Approach William C. Brown

Aquatics for the Handicapped - Red Cross Society
Audible Ball - American Foundation for the Blind

Canadian Association for Disabled Skiers Materials -
Corrective and Recreational Gym Classes for the Blind - The New Outlook
Kids Camping - American Printing House for the Blind
Modern Dance - Kimbo Educational
Movement Without Sight - Peek Publications
Physical Education and Recreation for the Visually Handicapped - AAPHER
Physical Education for Blind Children - Charles C. Thomas
Swimming for Children with Physical and Sensory Impairments - Charles C. Thomas

Swimming for the Handicapped, Instructor's Guide -
How Art and Music Speak to Us - John Day Co.; American Printing House for the Blinc
Sharing Your Knowledge of Folk Guitar With a Blind Friend - The New Outlook

FINE ARTS AND INDIVIDUAL EXPRESSION
Adventures in Knitting - American Printing House for the Blind
Art Fundamentals, Theory and Practice - William C. Brown
Basic Drama Projects - Clark Pub.
Batik Art and Craft - Van Nostrand-Reinhold
Brush and Pallette - Van Nostrand-Reinhold
Ceramics, A Potter's Handbook - Holt, Reinhart and Winston
The Complete Book of Ceramic Art - Crown Publishers
Creating With Paper - University of Washington Press
Creating With Plaster - Reill
Creative Clay Design - Van Nostrand-Reinhold
Creative Drawing: Point and Line - Van Nostrand-Reinhold
Creative Print-Making - Prentice-Hall
Drawing: Ideas, Materials and Techniques - Davis Publications Inc.
Family Life Program in "Special Classes" - London Board of Education
A First Book of Leatherworking - American Printing House for the Blind
Form, Space and Vision (2nd edition) - Prentice-Hall
Graded Lessons in Macrame, Knotting and Netting - General Publishing; American Printing House for the Blind

How Art and Music Speak to Us - John Day Co.; American Printing House for the Blind Imaginative Techniques in Painting - Reinhold Publishing Corp. Improvisation - Discovery and Creativity in Drama - Methuen and Co., Ltd.

Junior High School Art Curriculum Guide - Alberta Education
Learning to Listen to Music - Silver Burdett

Making Pottery Without a Wheel - Van Nostrand-Reinhold
Nobody in the Cast - Ryerson Press
Painting in the Classroom -
Painting With Synthetic Media - Van Nostrand-Reinhold
Plastics as an Art Form - Chilton Book Co.
Polymer Painting - Van Nostrand-Reinhold
Pottery and Ceramic Sculpture - Sunset Publishing
Relief Printmaking - Davis Publishing
Sculpture in Plastics - Watson-Guptill Publications
Stage Make-up - Watson-Guptill Publications
Stitchery Art and Craft - Van Nostrand-Reinhold Pub. Co.
Canada's Endangered Species - Alberta Education
Energy Management for the Future - Dept. of Mines, Energy and Resources Fanily Life Program in "Special Classes" - London Board of Education Go ernment Environmental Resource Materials Guide - Alberta Education Hinterland Who's Who Series - Canadian Wildlife Association, Ottawa Man and His Cities - Benefic Press

Pollution Solution - Holt, Rinehart and Winston
Schools Without Failure - Harper and Rowe
Science Experiments You Can Eat - J.B. Lippincott

CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY
Department of Immigration Materials - Department of Immigration
Department of Trade and Tourism Materials - Department of Trade and Tourism
Family Life - Frank E. Richards Pub. Co., Inc.
Government Environmental Resource Materials Guide - Alberta Environment
Marooned - Frank E. Richards Publishing

Parenting - NEA
Parks Canada Catalogue - Department of Indian and Northern Affairs

## LEVEL 6

UNDERSTANDING SELF AND GETTING ALONG WITH OTHERS
Canadian Classification and Dictionary of Occupations - Department of Manpower and Immigration.

Dating Tips for Teens - American Printing House for the Blind Exploring Your Personality - American Printing House for the Blind Exploring Your Values - American Printing House for the B1ind Family Planning - Follett Pub. Co.

Getting Along With Others - American Printing House for the Blind Girls and Sex - American Printing House for the Blind

Gregg/McGraw-Hill Series for Independent Living Program Guide Growing Up Emotionally - American Printing House for the Blind Growing Up Socially - American Printing House for the Blind How to be Your Own Best Friend - Ballantine Books

Hcw to Get Along with People - American Printing House for the B1ind
How to Increase Your Self-Confidence - American Printing House for the B1ind How to Live with Parents - American Printing House for the B1ind

I'm O.K. - You're O.K. - Human Development Training Institute
Innerchange: A Journey Into Self-Learning Through Group Interaction - Human Development Training Institute

It's Your Life - Benefic Press
Lifeline - Benefic Press
Looking Ahead to Marriage - American Printing House for the B1ind
Love and Sex in Plain Language - Bantam
Magic Circle - Human Development Training Institute
Our Bodies, Ourselves - American Printing House for the Blind
Perspectives for Living - Edmonton Public School Board

SRA Guidance Series - Science Research Associates
The Search for Self-Respect - Bantam
Sex Education and Family Life for Visually Handicapped Children and Youth: A Resource Guide - American Foundation for the Blind

Sex Education for the Visually Handicapped in Schools and Agencies (selected papers) - American Foundation for the Blind

Understanding Love - American Printing House for the Blind
Understanding Yourself - American Printing House for the Blind
Values Clarification - Hart
Who's Afraid of Virginia Wolf? - Atheneum
Youth and Sex: Pleasure and Responsibility - Nelson-Hall Company

## HEALTH

Alcohol Problem: What Do You Think - Visual Education Centre
Battline Disease - Globe Book Co.
Canada Food Guide - Department of Public Health
Drugs: Facts on Their Use and Abuse - Scott, Foresman and Co.; American Printing House for the Blind

Exploring Home and Family Living - American Printing House for the B1ind
Facts About Alcohol - Science Research Assoc.; American Printing House for the Blind

Facts About Narcotics and Dangerous Drugs - Science Research Associates; American Printing House for the Blind

Facts About Smoking and Health - Science Research Assoc..; American Printing House for the Blind

Facts About Veneral Disease - Science Research Assoc.; American Printing House for the Blind

Food and Your Weight - American Printing House for the Blind
Heart Attack: You Don't Have to Die - American Printing House for the Blind,

Hope and Help for Your Nerves - Bantam; American Printing House for the Blind

HEALTH (cont'd.)
How Not to Die Young - American Printing House for the Blind
I Think I'll Start on Monday - American Printing House for the Blind 100 Delicious Ways to Stay Slim - American Printing House for the Blind

Prenatal Care - American Printing House for the Blind
Sex Education for the Visually Handicapped in Schools and Agencies (selected papers) - American Foundation for the Blind

Smoke Screen
Smoking, Health and You - U.S. Dept. of Health, Education and Welfare; American Printing House for the Blind

Smoking, Your Choice Between Life and Death - American Printing House for the Blind

A Step-By-Step Guide to Personal Management for Blind Persons (2nd edition) American Foundation for the Blind

Teaching Resources for Secondary School Home Ec. - Alberta Education, Teen Guide to Homemaking - American Printing House for the Blind

A Tren-Age Guide to Healthy Skin and Hair - Clarke, Irwin, and Co.; American Prınting House for the Blind
V.D.: Facts You Should Know - Scott, Foresman and Co.; American Printing House for the Blind
V.D.: The ABC's - American Printing House for the Blind

What You Should Know About Drugs - Harcourt, Brace, Jovanovich, American Printing House for the Blind

What You Should Know About Drugs and Drug Abuse - American Printing House for the Blind

You and Your Foods - American Printing House for the Blind
You and Your Health - Science Research Assoc.
Youth and the Drug Problem - American Printing House for the Blind

SAFETY
St. John's Ambulance Materials
Smartest Kid in Town - National Society for the Prevention of Blindness
Standard First Aid and Personal Safety - Doubleday and Co.

Accent/World of Work - Follett Pub. Co.
Alberta Labor Legislation
All About Jobs - Mafex Associates, Inc.
Attitude Safety Posters - Worker's Compensation Board of Alberta
C.N.I.B. List of Canadian Occupations

Eanadian Classification and Dictionary of Occupations - Occupational Research Section, Dept. of Manpower

Career Awareness - K.S.P.
Career Choices for the $70^{\prime}$ s - American Printing House for the Blind
A Career Planning Guide - Occupational and Career Analysis Branch; Employment and Immigration

Career Search - Scholastic Book Co.

Careers and Opportunities In Music - American Printing House for the Blind
Careers Comparison Kit - Mafex Associates, Inc.

Careers in Data Processing - American Printing House for the Blind

Discovering Your Real Interests - American Printing House for the Blind
Do Your Dreams Match Your Talents? - American Printing House for the Blind
Finding Part-Time Jobs - Science Research Associates; American Printing House for the Blind

Forms in Your Future - Learning Trends Pub.
Forms in Your Life - Globe Press
40 Letters to Write - Huslton Educational Publication
Getting Applications Right - Scholastic
Getting That Job - American Printing House for the Blind
Girls and Their Future - Science Research Associates; American Printing House for the Blind

Good Work Habits - Mafex Associates, Inc.
Guide to the Community - Elwyn Institute
How Do I Fill Out A Form? - Ideal

WORLD OF WORK (cont'd.)
How Teenagers Can Get Good Jobs - American Printing House for the Blind
How to Get a Job - Science Research Associates; American Printing House for the Blind

How to Get a Job - American Printing House for the Blind
Janus Job Interview Guide - Janus Book Pub.
Janus Job Planner - Janus Book Pub.
Job Attitudes - Mafex Associates, Inc.
A Job Search Guide - Ministry of Supply and Services
Keeping That Job - American Printing House for the Blind
Lifeskills Essential Curriculum Materials for Secondary Students 1978/79
Catalogue/Junior and Senior High/Adult and Special Education - Lakeshore Curriculum Materials

Looking Into the Future - Frank E. Richards Pub. Co., Inc.
My Job Application File (2nd edition) - Janus Book Pub.
The Nature of Work - National Film Board
Occupational Health and Safety Regulations - Alberta Department of Labor
Occupations 2 - New Readers Press
PATH - Positive Attitudes Towards the Handicapped - Regional Resource Service
Personal Resume Preparation - American Printing House for the Blind
Questions About Compensation Benefits Answered - Worker's Compensation Board
Reference Manual for Office Personnel - American Printing House for the Blind
Resumes That Get Jobs: How to Write Your Best Resume - American Printing House for the Blind

Service Occupations - Frank E. Richards Pub. Co., Inc.
So You Want To Be A Social Worker - American Printing House for the Blind
Social and Prevocational Information Battery - V.R.R.I.
Work Experience Handbook - Alberta Education
You and Your Occupation - American Printing House for the Blind
You and Your Pay - American Printing House for the Blind

Your Career If You're Not Going to College - American Printing House for the B1ind

Your Personality and Your Job - Science Research Associates; American Printing House for the Blind

## HOME MANAGEMENT

Ask Your Neighbor - American Printing House for the Blind
Baby-Sitters Handbook - American Printing House for the Blind
Better Homes and Gardens Cookbook Series - American Printing House for the Blind
Betty Crocker's Cookbook - Bantam; American Printing House for the Blind
Beyond T.V. Dinners - Living Skills Center for V.I.
The Braille Cookbook - American Printing House for the Blind
Calgary Milk Foundation Materials - Calgary Milk Foundation
Cooking Without Recipes - American Printing House for the Blind
The Cooks Companion - American Printing House for the Blind
Dept. of Foods and Nutrition Materials - Dept. of Foods and Nutrition
Family Meals and Hospitality - American Printing House for the B1ind
Food at Your Fingertips - American Printing House for the Blind
Food Facts for Young People - American Printing House for the Blind
Food Freezing at Home - Royal National Institute for the Blind
General Foods Corporation - General Foods Corporation
Guide to Modern Meals - McGraw-Hill
The Home: Its Furnishings and Equipment - American Printing House for the Blind

The Home: Its Furnishings and Equipment - McGraw-Hill
Home Repairs Any Woman Can Do - American Printing House for the Blind Homemaking for Teen-Agers, Book 2 - American Printing House for the Blind

How Does It Work - Doubleday, 1961; American Printing House for the Blind

HOME MANAGEMENT (cont'd.)
How to Repair Electrical Appliances - American Printing House for the Blind

How You Plan and Prepare Meals - American Printing House for the Blind
I Hate to Cook Book - American Printing House for the Blind
I Hate to Housekeep Book - American Printing House for the B1ind
James Beard Cookbook - American Printing House for the Blind
Lessons in Living - Ginn and Co.

My Own Cookbook - American Printing House for the Blind
Nutrition Communication - Ontario Milk Marketing Board
100 Delicious Ways to Stay Slim - American Printing House for the Blind

Sew It Yourself - Gage Educational Publishing Ltd.
Sewing Manual - Illinois Community Services for the V.I.
Sewing Techniques for the Blind Girl - American Printing House for the Blind
So Yuu Want to Buy a House - American Printing House for the Blind
So What About Sewing, A Complete Guide - Services for the V.I.
Social Competency - Instructional Materials Reference Center for Visually Handicapped Children

A Step-By-Step Guide to Personal Management for Blind Persons (2nd edition) American Foundation for the Blind

Students Notebook - A Cooking Manual for Teenagers Who Like to Cook - American Printing House for the Blind

Teen Guide to Homemaking - American Printing House for the Blind

The Teenagers Menu Cookbook - Dodd Mead and Co. (2nd edition); American Printing House for the Blind

Towards Independence: The Use of Instructional Objectives in Teaching Daily Living Skills to the Blind - American Foundation for the Blind

MONEY MANAGEMENT
The Advertisement Book - Doubleday Canada

The Bank Book - Frank E. Richards Pub. Co. Inc.

Banking, Budgeting and Employment - Frank E. Richards Pub. Co. Inc.

Big Deal - Western Education Activities
Checking Accounts, Checks, and Stubs - Mafex Associates
Comparison Shopping Learning Activity Package - United Graphics
Consumer Education Materials: An Annotated List from Alberta Consumer and Corporate Affairs - Alberta Education

Dollars and Sense - A Guide to Family Money Management Series - Troll Assoc.
Fill in the Blanks - Mafex Associates, Inc.
Food Buymanship - Consumer's Association of Canada
Getting Ready for Payday - Frank E. Richards Pub. Co. Inc.
Gyps and Frauds - Case Study Booklet 2 - Changing Times Educational Service
It's Your Money - Methuen Pub.
Let's Go Shopping - CTES Audio Visual Resource
Lifeskills: Essential Curriculum Materials for Secondary Students 1978/79 Catalogue/Junior and Senior High/Adult and Special Education - Lakeshore Curriculum Materials

Making the Most of Your Money - American Printing House for the Blind
Mathematics for Adult Living - Mafex Associates, Inc.
Mathematics for Banking - Mafex Associates, Inc.
Mathematics for Citizenship - Mafex Associates, Inc., American Printing House for the Blind

Mathematics for Employment Part 1, Part 2 - Mafex Associates, Inc.; American Printing House for the Blind

Mathematics for Everyday Living - Mafex Associates, Inc.
Mathematics for Family Living - Mafex Associates, Inc.; American Printing House for the Blind

Mathematics for the Worker - Mafex Associates, Inc.
Money and the Kids: How to Earn It, Save It and Spend It - American Printing House for the Blind

Money Makes Sense - Canadian Edition - Copp Clark
Money Management - McGraw-Hill, E.S.P.
Pacemaker Practical Arithmetic Series - Copp Clark

MONEY MANAGEMENT (cont'd.)
Using Money Series - Frank E. Richards Pub. Co., Inc. (revised edition)
Supershopper - Guide to Spending and Saving - Book Society of Canada, American Printing House for the Blind

Wages, Salaries and Paycheques - Mafex Associates, Inc.
Working Makes Sense - Copp Clark
You and Your Pay - American Printing House for the B1ind

MOTOR DEVELOPMENT AND PHYSICAL ACTIVITIES
Active Games for the Blind - American Printing House for the Blind
Adapted Physical Education and Recreation: A Multi-disciplinary Approach William C. Brown

Aud-A-Ba11 - Sensory Aids Corp.
Audible Ball - American Foundation for the Blind

Canadian Association for Disabled Skiers Materials - Canadian Association for Disabled Skiers

Corrective and Recreational Gym Classes for the B1ind - The New Outlook
Huckey - American Printing House for the B1ind
Modern Dance: Music and Materials for Technique - Kimbo Educational
Movement Without Sight - Peek Publications
Physical Education and Recreation for the Visually Handicapped - AAPHER
Physical Education for Blind Children - Charles C. Thomas
Staley Sports Field Kits - American Printing House for the Blind
Swimming for Children with Physical and Sensory Impairments - Charles C. Thomas

FINE ARTS AND INDIVIDUAL EXPRESSION

Adventures in Knitting - American Printing House for the Blind
Art Fundamentals, Theory and Practice - William C. Brown

Batik Art and Craft - Van Nostrand-Reinhold

Brush and Pallette - Van Nostrand-Reinhold

Ceramics, A Potter's Handbook - Holt, Reinhart and Winston
The Complete Book of Ceramic Art - Crown Publishers

Concise History of the Theatre - Hartnoll, Thames and Hudson
Creating With Paper - University of Washington Press
Creating With Plaster - Reilly
Creative Clay Design - Van Nostrand-Reinhold
Creative Drawing: Point and Line - Van Nostrand-Reinhold
Creative Printmaking - Prentice-Hall
Curriculum Guide for Drama - Alberta Education

Development in Drama - Longman Canada Ltd.
Drawing: Ideas, Materials and Techniques - Davis Publications, Inc.
A First Book of Leatherworking - American Printing House for the Blind Form, Space, and Vision (2nd edition) - Prentice-Hall

Fundamentals of Play Dilecting - Holt, Reinhart and Winston
Graded Lessons in Macrame, Knotting, and Netting - General Publishing; American Printing House for the Blind

A Handbook of Stanislovski - Crown Publishing
The Handbook of the Theatre - W.G. Gage

How Art and Music Speak to Us - John Day Co. (revised edition); American Printing House for the Blind

Imaginative Techniques in Painting - Reinhold Publishing Corp.
Improvisation - Discovery and Creativity in Drama - Methuen and Co. Ltd.

Improvisation for the Theatre - Northwestern University Press
Jiffy Knits - American Printing House for the Blind
Junior High School Art Curriculum Guide - Dept. of Education, Edmonton
Knitting Made Easy - American Printing House for the Blind
Leap to Life - Chatto and Windus

Learning to Listen to Music - Silver Burdett

Making Pottery Without a Wheel - Van Nostrand-Reinhold
Nobody in the Cast - Ryerson Press
Oral Interpretation - Houghton-Mifflin
Painting with Synthetic Media - Van Nostrand-Reinhold
Plastics as an Art Form - Chilton

Polymer Painting - Van Nostrand-Reinhold
Pottery and Ceramic Sculpture - Sunset Publishing
Recipes for Art and Craft Material - Lothrop, Lee and Shepard Co., American Printing House for the Blind

Relief Printmaking - Davis Publishing
Scene Design and Stage Lighting - Holt, Rinehart and Winston
Sculpture in Plastics - Watson-Guptill
Sharing Your Knowledge of Folk Guitar with a Blind Friend - The New Outlook,

Stage Make-Up - Appleton-Century-Croft
S_age Make-Up - Watson-Guptill
Stitchery: Art and Craft - Van Nostrand-Reinhold Pub. Co.
Teaching Drama - University of London Press, Ltd.
Training the Speaking Voice - Oxford University Press
Voice and Speech - James Nisbet and Co. Ltd.

## CITIZENSHIP AND INDIVIDUAL RESPONSIBILITY

Department of Immigration Materials - Department of Immigration
Department of Trade and Tourism Materials - Department of Trade and Tourism
Family Life - Frank E. Richards Pub. Co. Inc.

Government Environmental Resource Materials Guide - Alberta Environment

Marooned - Frank E. Richards Publishing
Parenting - NEA
Parks Canada Catalogue - Department of Indian and Northern Affairs

HV 1638 A32 1981
ALBERTA ALBERTA EDUCATION
VISUALLY IMPAIRED CURRICULUM GUIDE/

39835367 CURR HIST
*000017565540*

DATE DUE SLIP


HV 1638 A32 1981
Alberta. Alberta Education
Visually impaired curriculum guide /

39835367 CURR HIST

## CURRICUIUM GUIDE

## For Reference

NOT TO BE TAKEN FROM THIS ROOM


[^0]:    Describes examples of misleading
    9.

